OFFICE OF MINERALS EXPLORATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF ROYALTY REVIEW

I have reviewed the files of the Office of Minerals Exploration, Washington, D. C., pertaining to Contract No. Idm-E339, Docket No. MEA-2399 (Lead, zinc), dated June 11, 1952, with

The Eagle-Picher Company
Mining and Smelting Division
First National Bank
Miami, Oklahoma

for the purpose of determining the amount of royalty due the U. S. Government on sales of minerals from property referred to as Calvert-Ralph Orebody located in Lafayette County, Wisconsin, during the period June 11, 1952, through June 30, 1960.

A certification of discovery or development was issued on September 3, 1954, and, in accordance with Article 6 of the contract, royalty is payable on all minerals mined or produced from the land described in Article 2 of the contract for a period of 10 years from the date of the contract or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first. A Report of Review in lieu of final audit dated March 31, 1954, indicated accepted costs under the exploration contract amounting to $67,957.76 with the Government's contribution, on a 50 percent basis, being $33,978.88.

This review was made in lieu of an on-site audit of the Operator's accounts and records for the following reasons:

(1) Inspection reports by representatives of the Government and other correspondence in the Washington office files indicate that there has not been any production of minerals from the property on which royalty would be due to the Government since the date of the exploration contract; and

(2) The administrative cost to the Government of an on-site royalty audit at this time would be excessive in relation to the amount of possible royalty which might be disclosed.

C. E. Fisher

C. E. Fisher, OME Auditor

July 6, 1960

DEFENSE MINERALS EXPLORATION ADMINISTRATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF REVIEW

I have reviewed the Monthly Reports of:

Eagle-Picher Company
First National Bank Building
Miami, Oklahoma

pertaining to Exploration Project Contract No. Idm-133, Docket No. DMEA-2999, including Amendment No. 1, for the months of June, 1952 to February, 1954, inclusive, covering a project for the exploration of lead and zinc located in Lafayette County, Wisconsin.

My review included an examination of the Monthly Reports (Forms MF-104) and supporting documents attached thereto, comparison of the costs claimed with the contract and pertinent schedules, verification of the work performed by reference to the final report of the Government representatives who visited and examined the project, and a determination of the reasonableness and propriety of the costs.

This review was made in lieu of a final audit of the Operator's accounts and records for the following reasons:

(a) a major portion ($56,195.87) of the costs incurred were under a contract provision for payment by the Government on the basis of agreed estimated costs of units of work actually performed; and
(b) only supervisory and technical costs were on basis other than agreed unit costs.

The review disclosed the following facts in regard to the amount paid or to be paid the contractor:

Total cost as billed by Contractor		$67,957.85
Less: Odd cents calculations		.09
Exceptions:		
By DMEA Finance Officer	$ -0-	
Herewith	-0-	-0-
Total Accepted Cost		$67,957.76

The contract calls for a 50 percent participation of exploration expenses by the United States Government. Therefore, payment to the contractor by the Government in the amount of Thirty-three thousand nine hundred ninety-eight and 88/100 Dollars

** $33,978.88**

is considered valid and proper, provided that the Regional Executive Officer, the Administrator, or other competent official has accepted or will accept the project as having otherwise met the terms of the contract.

March 31, 1954

Jay L. Chambers, Auditor

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

MAR 31 1954

Mr. A. B. Needham
Executive Officer
DMEA Field Team, Region V
2908 Colfax Avenue, South
Minneapolis 8, Minnesota

Re: Docket No. DMEA-2399
Eagle-Picher Company
Lafayette County, Wis.
Contract No. Idm-2339

Dear Mr. Needham:

Reference is made to a letter dated March 22, 1954 from Mr. L. A. Hill, forwarding our copies of the final voucher for the above-cited project.

As a result of the receipt of this voucher and also of the Operator's final engineering and geological report, a Report of Review has been issued. The regional copies of the Report are enclosed for distribution in accordance with DMEA Circular 19.

Sincerely yours,

(Signed) J. L. Chambers

Jay L. Chambers, Chief
Contract Administration
and Audit Division

Enclosure

WBorovies/wb
March 31, 1954

Copy to: Docket
Admr. Reading File
Mr. Chambers

E339

Summary of Units and Costs

	Drilling	Plugs	Ch. Rec.	Field Rec.
June 11 - July 31, 1952	4712.5'	24	1 2/3	1 2/3
Aug	2493.5	14	1	1
Sept.	2663.	17	1	1
Oct.	2401.	17	1	1
Nov.	1411.	10	1	1
Dec.	1817.	9	1	1
Jan. 1953	2859.	14	1	1
Feb	1789.5	11	1	1
Totals to date	20,146.5'	116	8 2/3	8 2/3
Contract Unit Costs	$1.565	$5.00	$425.00	$397.00
	$31,529.27	$580.00	$3,683.33	$3,440.67
Mar	394'	2	1/7	1/7
Apr	1,788	16	1	1
May	1,332	7	1/2	1/2
June	1,782	9	9/14	9/14
July	1,425	7	1/2	1/2
Aug	1,349	6	6/14	6/14
Sept	1,571	7	7/14	7/14
Oct	1,568	8	8/14	8/14
Nov	607	3	3/14	3/14
Dec.	1,384	6	6/14	6/14
Jan.	1,562	8	8/14	8/14
Feb	370	2	2/14	2/14
Totals to date	35,278.5	197	14 1/3	14 1/3
Contract Unit Costs	$1.565	$5.00	$425.00	397.00
	$55,210.87	$985.00	$6,081.32	$5,680.66

Form M-104 (Rev.)
(April 1952)

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
Bureau No. 42-R1036.4
Approval expires 6-30-53.
RECEIVED
MAR 24 1954

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of February, 1954 Docket No. DMEA 2399 Contract No. Ian 2 399
Operator's Name The Eagle-Picher Co. Minerals Lead & Zinc
Address 191, 30.70 Galena, Illinois
Contract Amount, $ Government Participation: 90 % Amount, $ 99,619.39

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent ~~Short Form~~ Contracts:	509.05	55,606.82	56,195.87	509.05	55,606.82	56,195.87
Drilling						
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision	117.42	11,644.56	11,761.98	117.42	11,644.56	11,761.98
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	706.47	67,251.38	67,957.85	706.47	67,251.38	67,957.85

I certify that the above bill is correct and just and that payment therefor has not been received. Feb. 1954 The Eagle-Picher Co.

Date *Payee

Per A G Dougherty Title Plan t Accountant

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 353.23

Signature
(Authorized Certifying Officer)

Date Vou. No. 25
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. dm 2339 in accordance with the terms of the contract.

Signature Wesley A. Roach Title Mining Engineer Date 3/12/54

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature O. B. Needham Title Exec Officer Date 3/16/54

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 83-38476

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.1
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 24 1954

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of February 1954 Docket No. DMEA 2399 Contract No. [illegible] 339
Operator's Name The Eagle-Picher Co Minerals Lead & Zinc
Address Galena, Illinois

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core					35278.5			
Churn	feet	706.47	370	67,957.85	~~35,279~~	1.926		
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		706.47		67,957.85				171,[illegible]

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date Mar. 10, 1954 Operator The Eagle-Picher Co.

Per A G Dompkins Title Plant Accountant

REMARKS:

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 83-38475

DEPARTMENT OF THE INTERIOR
Defense Minerals
REC'D
MAR 24 1954

WORK PROGRESS REPORT

Docket 2399 Month February

Contract Idm E-339 Company Eagle-Picher Company

Property East of Cuba City

DRILLING - The following holes were completed this period:

Lease	Hole	Date started	Date completed	Depth
Francis M. Calvert	53	1/28/54	2/1/54	210
Clarence P. Ralph	31	2/ 2/54	2/4/54	160

The following holes were in progress this period, but not completed:

Lease	Hole	Date started	Footage reported	Remarks
		None		

TOTAL (completed) ~~(accrued)~~ footage this period 370 To date 35,278.5
scratch one

DRIFTING AND CROSSCUTTING - Headings were advanced as follows:

Name and location	Average cross-section	Advance From-	Advance To-	Advance for period	Total advance to date	Remarks

TRENCHING AND TEST PITTING - The following excavations were in progress this period:

Name and location	Cubic yards this period	Cubic yards to date	Linear feet this period	Linear feet to date	Remarks

OTHER MAJOR WORK -

All work was performed in a satisfactory manner and the attached Form MF-104, Monthly Report, constituting certified invoice, rendered by the contractor under date of March 10, 19 54, totalling $ 706.47, has been carefully checked and approved by me.

APPROVED BY:

Wesley A Brook
Mining Engineer ~~xxGeologist~~

W. A. Broughton
~~xxMining Engineerxx~~ Geologist

THE EAGLE-PICHER COMPANY GALENA, ILLINOIS

DRILLING UNDER DMEA CONTRACT--FEBRUARY, 1954

	Hole No.	Footage Drilled
Project No. 2		
Francis M. Calvert	53	210
Clarence P. Ralph	31	160
Total footage drilled February - -		370 ft.

Drilling Cost-- 370 feet @ $1.565 per foot	$ 579.05
Plugging 2 holes @ $5.00 each	10.00
*Chief Geologist 1 month 2/14 of $425.00	60.71
Field Geologist 1 " 2/14 of 397.00	56.71
Total cost month of February, 1954	$ 706.47

*Note: 14 holes used as a normal month for salary overhead. February--2 holes--2/14 of salaries

THE EAGLE-PICHER COMPANY
MINING AND SMELTING DIVISION
GEOLOGICAL DEPARTMENT
CARDIN, OKLAHOMA

RECEIVED
2 4 1954

February 25,1954.

United States Department of Interior,
Defense Minerals Exploration Administration,
Minneapolis, Minnesota.

ATT: MR. A. B. NEEDHAM.

Gentlemen:

The following is our summary of the drill holes that were drilled by The Eagle-Picher Company in LaFayette County,Wisconsin, during the month of February, 1954, under Defense Minerals Exploration Contract, number Idm-E 339:

LEASE	DRILL HOLE NO.	REMARKS
Clarence P. Ralph,	31	Marcasite estimated at 1 to 2% FeS_2 was cut at 100-115 feet depth. The Oil Rock horizon is thick and limy which is an unfavorable factor for zinc mineralization in the lower horizons. This completes our drilling program on the Clarence P. Ralph lease.
Francis Calvert,	53	This hole was drilled to more closely delineate the orebody. Fair to rich marcasite mineralization occurred from 150 to 205 feet depth. Mineralization from 185 to 200 feet depth, in the Gray, Blue and Oil Rock horizons averaged 13.09% FeS_2 and 0.51% ZnS. This completes our drilling program on the Francis Calvert lease.

Sincerely,

THE EAGLE-PICHER COMPANY.

By. J. P. Lyden

J. P. Lyden,
Chief Geologist,
Mining & Smelting Div.

JPL/tp.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D. C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

April 14, 1954

Memorandum

To: Operating Committee, Defense Minerals Exploration Administration, Washington, D. C.

From: Executive Officer, Field Team, Region V

Subject: Docket DMEA 2399, Contract E-339, Eagle-Picher Co.

Copies of the February Operator's Monthly Report and Voucher were furnished your office recently, and have been retained by you.

In accordance with your request, please be advised that the voucher number on the final payment is No. 25.

A. B. Needham

A. B. NEEDHAM

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.4
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of January, 195[illegible] Docket No. DMEA [illegible] Contract No. [illegible]
Operator's Name [illegible] Minerals [illegible]
Address [illegible]
Contract Amount, $ 191,230.[illegible] Government Participation: [illegible] % Amount, $ 22,015.39

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent ~~XXXXX~~ Short Form Contracts:	2604.53	53,122.29	55,606.62	2604.53	53,122.29	55,606.62
Drilling						
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision	469.72	11,174.84	11,644.56	469.72	11,174.84	11,644.56
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	2954.25	64,297.13	67,251.38	2954.25	64,297.13	67,251.38

I certify that the above bill is correct and just and that payment therefor has not been received.

Date [illegible] *Payee [illegible] Lozier Co.

Per A. C. Tompkins Title [illegible]

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 1477.12 HG

Signature L. A. Hill
(Authorized Certifying Officer)

Date MAR 14 1954 Vou. No. 22

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. DMEA 339 in accordance with the terms of the contract.

Signature Wesley A. Bush Title Mining Engineer Date 2/23/54

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature O. B. Needham Title Exec Officer Date 7/25/54

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 83-38476

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.1
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

22

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of January 195[illegible] Docket No. DMEA [illegible] Contract No. [illegible]
Operator's Name [illegible] Minerals [illegible]
Address [illegible]

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core					34908.5			
Churn	foot	[illegible]	1262	61,691.33	[illegible]	1.927		
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Total Distributed Costs								Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		[illegible]		61,691.33				[illegible]

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date Feb. 17, 1954 Operator [illegible] Lo-Labor Co.

Per A. C. Tompkins Title Plant Supt.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

Remarks:

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 83-38475

THE EAGLE-PICHER COMPANY GALENA, ILLINOIS

DRILLING UNDER DMEA CONTRACT--JANUARY, 1954

	Hole No.	Footage Drilled
Project No. 2		
Francis J. Calvert	49	225
	50	165
	51	197
	52	230
Clarence F. Ralph	27	240
	28	170
	29	165
	30	170
Total footage drilled January - - - - -		1562 ft.

Drilling cost - 1562 feet @ 1.565 per foot	$2,444.53
Plugging 8 holes @ $5.00 each	40.00
*Chief Geologist 1 month @ 8/14 of $425.00	242.86
Field " 1 " @ 8/14 of $397.00	226.86
Total cost month of January, 1954	$2,954.25

*Note: 14 holes used as a normal month for salary overhead. January--8 holes--8/14 of salaries

THE EAGLE-PICHER COMPANY
MINING AND SMELTING DIVISION
GEOLOGICAL DEPARTMENT
CARDIN, OKLAHOMA

February 4, 1954.

United States Department of Interior,
Defense Minerals Exploration Administration,
Minneapolis, Minnesota.

ATT: MR. A. B. NEEDHAM.

Gentlemen:

The following is our summary of the drill holes that were drilled by The Eagle-Picher Company in LaFayette County, Wisconsin, during the month of January, 1954, under Defense Minerals Exploration Contract, number Idm-E 339:

LEASE	DRILL HOLE NO.	REMARKS
Clarence P. Ralph,	27	Mineralization from 215 to 232½ feet depth in the Blue, Oil Rock & Clay Bed horizons averaged 0.73% ZnS and 9.41% FeS_2. There was open ground from 200 to 212½ feet.
Clarence P. Ralph,	28	The marcasite mineralization was estimated at 4 to 12% FeS_2 from 70 to 160 feet depth. The ground was loose and broken from 85 to 155 feet depth. There was no blende noted in this hole.
Clarence P. Ralph,	29	From 55 to 110, and 135 to 165 feet depth the marcasite mineralization was estimated at 4 to 10% FeS_2. Only a few specks of blende were noted in this hole.
Clarence P. Ralph,	30	Marcasite mineralization estimated at 2 to 5% FeS_2 was cut from 110 to 125 feet depth. This drill hole marks the north edge of the thin Oil Rock & Glass Rock zone that contained blende in the North Star mine and marcasite in drill holes numbers 28 & 29.

LEASE	DRILL HOLE NO.	REMARKS
Francis Calvert,	49	Marcasite mineralization estimated at 5 to 20% FeS_2 was cut from 55 to 105 feet depth. A few specks of blende were noted.
Francis Calvert,	50	Mineralization from 135 to 150 feet depth averaged 5.93% ZnS and 14.87% FeS_2. Broken ground and small recovery of cuttings from 80 to 150 feet depth.
Francis Calvert,	51	Fair marcasite mineralization was cut at 45-50, 70-95, 110-115, and 155 to 170 feet depth. Low grade blende mineralization was cut at 85 to 95 feet depth. This hole was loose and open from 70 to 95 feet depth and from 125 to 170 feet depth.
Francis Calvert,	52	Marcasite mineralization estimated to average 8% FeS_2 was cut at 180 to 200 feet depth. Broken ground and small recovery of cuttings from 185 to 200 feet depth.

Sincerely,

THE EAGLE-PICHER COMPANY.

By. J. P. Lyden

J. P. Lyden,
Chief Geologist,
Mining & Smelting Div.

JPL/tp.

DRIFTING AND CROSSCUTTING - Headings were advanced as follows:

Name and location	Average cross-section	Advance From-	Advance To-	Advance for period	Total advance to date	Remarks

TRENCHING AND TEST PITTING - The following excavations were in progress this period:

Name and location	Cubic yards this period	Cubic yards to date	Linear feet this period	Linear feet to date	Remarks

OTHER MAJOR WORK -

All work was performed in a satisfactory manner and the attached Form MF-104, Monthly Report, constituting certified invoice, rendered by the contractor under date of February 17, 19 54, totalling $ 2,954.25, has been carefully checked and approved by me.

APPROVED BY:

Wesley A. Roach
Mining Engineer ~~or Geologist~~

W. A. Brumfiel
~~Mining Engineer or~~ Geologist

WORK PROGRESS REPORT

Docket 2399

Contract Idm E-339

Month January 1954

Company Eagle-Picher Company

Property East of Cuba City

DRILLING - The following holes were completed this period:

Lease	Hole	Date started	Date completed	Depth
Francis M. Calvert	49	1/14/54	1/16/54	225
" " "	50	1/18/54	1/20/54	165
" " "	51	1/20/54	1/23/54	197
" " "	52	1/25/54	1/27/54	230
Clarence P. Ralph	27	12/30/53	1/ 4/54	240
" " "	28	1/ 4/54	1/ 7/54	170
" " "	29	1/ 7/54	1/ 9/54	165
" " "	30	1/11/54	1/13/54	170

The following holes were in progress this period, but not completed:

Lease	Hole	Date started	Footage reported	Remarks
Francis M. Calvert	53	1/28/54	170	

TOTAL (completed)(~~xxxxxxxx~~) footage this period 1,562 To date 34,908.5
scratch one

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.4
Approval expires 6-30-53.

Nash

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of December 1953 Docket No. DMEA 2399 Contract No. Idm B 339
Operator's Name THE EAGLE-PICHER CO. Minerals Lead & Zinc
Address GALENA, ILLINOIS
Contract Amount, $ 191,230.78 Government Participation: 50 % = Amount, $ 95,615.39

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 3 1954

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Contractors:						
Drilling	2195.96	50,926.33	53,122.29	2195.96	50,926.33	53,122.29
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	352.28	10,822.56	11,174.84	352.28	10,822.56	11,174.84
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	2548.24	61,748.89	64,297.13	2548.24	61,748.89	64,297.13

I certify that the above bill is correct and just and that payment therefor has not been received.
Date Jan 13, 1954 *Payee THE EAGLE-PICHER CO.
Per A G Tompkins Title Plant Accountant

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 1274.12 HO

Signature L. H. Hill
(Authorized Certifying Officer)

Date JAN 28 1954 Vou. No. 20
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. DMA 2339 in accordance with the terms of the contract.

Signature Wesley A. Rush Title Mining Engineer Date 1/22/54

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature D. B. Needham Title Exec. Officer Date JAN 25 1954

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b). *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 83-38476

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.1
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

20

OPERATOR'S UNIT COST AND PROGRESS REPORT

DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration
RECEIVED
FEB 3 1954

Month of December 195 3 Docket No. DMEA 2399 Contract No. Idm R 339
Operator's Name THE EAGLE-PICHER CO. Minerals Lead & Zinc
Address GALENA, ILLINOIS

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core					33346.5			
Churn	foot	2548.24	1384	64,297.13	~~33346~~	1.928		
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Total Distributed Costs								Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		2548.24		64,297.13				$191,230.78

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date Jan. 13, 1954 Operator THE EAGLE-PICHER CO.

Per A C Tompkins Title Plant Accountant
A. C. Tompkins

Remarks:

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 83-38475

THE EAGLE-PICHER COMPANY GALENA, ILLINOIS

DRILLING UNDER DMEA CONTRACT--DECEMBER, 1953

	Hole No.	Footage Drilled
Project No. 2		
Clarence P. Ralph	21	232
"	22	223
"	23	227
"	24	225
"	25	240
"	26	237
Total footage drilled December - -		1384 Feet

Drilling cost - 1384 feet @ $1.565 per foot	$2,165.96
Plugging 6 holes @ $5.00 each	30.00
*Chief Geologist 1 month @ 6/14 of $425.00	182.14
*Field " 1 " @ 6/14 of $397.00	170.14
Total cost month of December, 1953	$2,548.24

*Note: 14 holes used as a normal month for salary overhead--December 6 holes --6/14 of salaries

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 3 1954

WORK PROGRESS REPORT

Docket 2399 Month December 1953

Contract Idm E-339 Company Eagle-Picher Company

Property East of Cuba City

DRILLING - The following holes were completed this period:

Lease	Hole	Date started	Date completed	Depth
Clarence P. Ralph	21	12/ 2/53	12/ 7/53	232
" " "	22	12/ 7/53	12/11/53	223
" " "	23	12/11/53	12/15/53	227
" " "	24	12/16/53	12/18/53	225
" " "	25	12/21/53	12/24/53	240
" " "	26	12/24/53	12/29/53	237

The following holes were in progress this period, but not completed:

Lease	Hole	Date started	Footage reported	Remarks
Clarence P. Ralph	27	12/31/53	165	

TOTAL (completed)(~~[illegible]~~) footage this period 1,384 To date 33,346.5
scratch one

DRIFTING AND CROSSCUTTING - Headings were advanced as follows:

Name and location	Average cross-section	Advance From-	Advance To-	Advance for period	Total advance to date	Remarks

TRENCHING AND TEST PITTING - The following excavations were in progress this period:

Name and location	Cubic yards this period	Cubic yards to date	Linear feet this period	Linear feet to date	Remarks

OTHER MAJOR WORK -

All work was performed in a satisfactory manner and the attached Form MF-104, Monthly Report, constituting certified invoice, rendered by the contractor under date of January 13, 19 54, totalling $ 64,297.13, has been carefully checked and approved by me.
($2548.24 this voucher)

APPROVED BY:

Wesley A. Peck
Mining Engineer ~~[illegible]~~

W. A. Broughton
~~Mining Engineer~~ Geologist

THE EAGLE-PICHER COMPANY
MINING AND SMELTING DIVISION
GEOLOGICAL DEPARTMENT
CARDIN, OKLAHOMA

January 5, 1954.

United States Department of Interior,
Defense Minerals Exploration Administration,
Minneapolis, Minnesota.

ATT: MR. A. B. [illegible].

Gentlemen:

The following is our summary of the drill holes that were drilled by The Eagle-Picher Company in LaFayette County, Wisconsin, during the month of December, 1953, under Defense Minerals Exploration Contract, number Idm-E 339:

LEASE	DRILL HOLE NO.	REMARKS
Clarence P. Ralph,	21	Mineralization from 210 to 225 feet depth in Blue, Oil Rock and Clay Bed horizons averaged 3.12% ZnS and 11.05% FeS_2. Loose and broken ground from 170 to 215 feet depth is unfavorable from mining standpoint.
Clarence P. Ralph,	22	Much limonite from 75 to 125 feet depth. Broken ground from 130 to 200 feet depth is unfavorable from mining standpoint.
Clarence P. Ralph,	23	Mineralization from 212½ to 220 feet depth in Oil Rock horizon averaged 5.30% ZnS and 8.9% FeS_2. This mineralization correlates in depth with that in drill holes 8 and 21 to form a small area of low grade ZnS mineralization.
Clarence P. Ralph,	24	Mineralization from 95 to 110 feet depth in top part of Drab horizon averaged 4.09% PbS and 15.97% FeS_2. Mineralization from 207.5 to 215 feet depth in Oil Rock and Clay Bed horizons averaged 2.00% ZnS and 11.9[illegible]% FeS_2. This hole was broken and loose from 95 to 207½ feet depth.

LEASE	DRILL HOLE NO.	REMARKS
Clarence P. Ralph,	25	Good marcasite mineralization occurs from 160 to 230 feet depth and low grade blende mineralization from 225 to 230 feet depth in the Oil Rock horizon. Broken ground and small recovery from 165 to 215 feet depth is unfavorable from mining standpoint.
Clarence P. Ralph,	26	Low grade galena mineralization from 105 to 115 feet depth in top part of Crab horizon. Broken ground from 170 to 200 feet depth in bottom part of Crab horizon.

Sincerely,

THE EAGLE-PICHER COMPANY.

By. J. P. Lyden

J. P. Lyden,
Chief Geologist,
Mining & Smelting Div.

JPL/tp.

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of November, 1953 195-3 Docket No. DMEA 2399 Contract No. Idm E339
Operator's Name THE EAGLE PICHER CO. Minerals Lead & Zinc
Address GALENA, ILLINOIS
Contract Amount, $ 191,230.78 Government Participation 50 % Amount, $ 95,615.39

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent ~~Short Form~~ Contracts:						
Drilling	$ 964.96	49,961.37	50,926.33	$964.96	49,961.37	50,926.33
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	176.14	10,646.42	10,822.56	176.14	10,646.42	10,822.56
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$ 1141.10	60607.79	$61,748.89	$1141.10	60,607.79	$61,748.89

I certify that the above bill is correct and just and that payment therefor has not been received.

Date Nov. 18, 1953 Payee The Eagle-Picher Co.

Per A G Dompkins Title Plant Accountant

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 570.55 HO

Signature L. A. Hill
(Authorized Certifying Officer)

Date DEC - 1 1953 Vou. No. 15
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. fdm E 339 in accordance with the terms of the contract.

Signature Wesley A. Brock Title Mining Engineer Date 11/24/53

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature J. B. Needham Title Ex Off Date 11/30/53

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

15

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of November 1953 Docket No. DMEA 2399 Contract No. Idm B 339

Operator's Name The Eagle-Picher Co. Minerals Lead & Zinc

Address Galena, Illinois

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn	foot	$1141.10	607	$61,748.89	31962	1.932		
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc								
TOTAL COSTS		$1141.10		$61,748.89				$191,230.78

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date Nov. 18, 1953 Operator The Eagle-Picher Co.

Per A C Dompkins Title Plant Accountant

REMARKS:

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

U. S. GOVERNMENT PRINTING OFFICE 205676

THE EAGLE-PICHER COMPANY
MINING AND SMELTING DIVISION
GEOLOGICAL DEPARTMENT
CARDIN, OKLAHOMA

November 16,1953.

United States Department of Interior,
Defense Minerals Exploration Administration,
Minneapolis, Minnesota.

ATT: Mr. A. B. NEEDHAM

Gentlemen:

The following is our summary of the drill holes for November,1953 which were drilled by The Eagle-Picher Company in LaFayette County, Wisconsin under Defense Minerals Exploration Contract number Idm-E 339:

LEASE	DRILL HOLE NO.	REMARKS
Clarence P. Ralph,	18	Rich marcasite mineralization from 200 to 210 feet depth in Blue and Oil Rock horizons. Fair marcasite from 210 to 222 feet depth. More drilling will be done close to this drill hole.
Clarence P. Ralph,	19	Fair marcasite mineralization from 140 to 160 feet depth. This was a firm hole.
Clarence P. Ralph,	20	Low grade marcasite mineralization with traces of blende from 45 to 137½ feet depth. This hole indicates that the east end of the Calvert-Ralph orebody is approximately 100 feet east of drill hole number 15.

Sincerely,

THE EAGLE-PICHER COMPANY.

By. J. P. Lyden
J. P. Lyden,
Chief Geologist,
Mining & Smelting Div.

JPL/tp.

THE EAGLE-PICHER COMPANY GALENA, ILLINOIS

DRILLING UNDER DMEA CONTRACT - NOVEMBER, 1953

	Hole No.	Footage Drilled
Project No. 2		
Clarence P. Ralph	18	222
	19	200
	20	185
Total footage drilled - November		607 feet

Drilling cost 607 feet @ $1.565 per foot	$ 949.96
Plugging three holes @ $5.00 each	15.00
* Chief Geologist 1 month @ 3/14 of $425.00	91.07
* Field " 1 " @ 3/14 of $397.00	85.07
Total cost month of November, 1953	$1,141.10

* Note:--14 holes used as a normal month for salary overhead. November 3 holes--3/14 of salaries

WORK PROGRESS REPORT

Docket 2399 Month November

Contract Tom E-339 Company Eagle-Picher Co.

Property East of Cuba City

DRILLING - The following holes were completed this period:

Lease	Hole	Date started	Date completed	Depth
Clarence P. Ralph	18	10/30/53	11/ 5/53	222
" " "	19	11/ 5/53	11/ 7/53	200
" " "	20	11/ 9/53	11/11/53	185

The following holes were in progress this period, but not completed:

Lease	Hole	Date started	Footage reported	Remarks

None

TOTAL (completed)(~~accumulated~~) footage this period 607 To date 31,962.5
scratch one

DRIFTING AND CROSSCUTTING - Headings were advanced as follows:

Name and location	Average cross-section	Advance From-	Advance To-	Advance for period	Total advance to date	Remarks

TRENCHING AND TEST PITTING - The following excavations were in progress this period:

Name and location	Cubic yards this period	Cubic yards to date	Linear feet this period	Linear feet to date	Remarks

OTHER MAJOR WORK -

All work was performed in a satisfactory manner and the attached Form MF-104, Monthly Report, constituting certified invoice, rendered by the contractor under date of November 18, 19 53, totalling $ 61,748.69, has been carefully checked and approved by me.

APPROVED BY:

Wesley A. Zwart
Mining Engineer ~~or Geologist~~

W. A. Beaumontbros
~~Mining Engineer or~~ Geologist

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of October, 1953 Docket No. DMEA 2399 Contract No. Idm 339
Operator's Name The Eagle-Picher Co. Minerals Lead & Zinc
Address Oklahoma, Illinois
Contract Amount, $ 191,230.78 Government Participation: 50 % Amount, $ 99,619.39

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent ~~Short Form~~ Contracts:						
Drilling	2493.92	47467.45	49961.37	2493.92	47467.45	49961.37
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	469.72	10176.70	10646.42	469.72	10176.70	10646.42
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	2963.64	57644.15	60607.79	2963.64	57644.15	60607.79

I certify that the above bill is correct and just and that payment therefor has not been received.
Date Nov. 16, 1953 *Payee The Eagle-Picher Co.
Per A. G. Tompkins Title Plant Accountant

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 1481.82 46

Signature L. A. Hill
(Authorized Certifying Officer)

Date NOV 30 1953 Vou. No. 15
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. DME339 in accordance with the terms of the contract.

Signature [illegible] Title Mining Engineer Date 11/25/53

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature [illegible] Title Ex Off Date 11/25/53

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

15

Month of October 1953 Docket No. DMEA 2399 Contract No. Idm-E-339
Operator's Name THE EAGLE-PICHER CO. Minerals Lead & Zinc
Address GALENA, ILLINOIS

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn	foot	2963.64	1568	60607.79	31355	1.933		
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		2963.64		60607.79				191,230.78

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date Nov. 16, 1953 Operator The Eagle-Picher Co.

Per A. G. Zompilino Title Plant Accountant

REMARKS:

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

U. S. GOVERNMENT PRINTING OFFICE 205676

THE EAGLE-PICHER COMPANY
MINING AND SMELTING DIVISION
GEOLOGICAL DEPARTMENT
CARDIN, OKLAHOMA

November 6,1953.

United States Department of Interior,
Defense Minerals Exploration Administration,
Minneapolis, Minnesota.

ATT: MR. A. B. NEEDHAM.

Gentlemen:

The following is our summary of the drill holes that were drilled by The Eagle-Picher Company in LaFayette County, Wisconsin, during the month of October, 1953, under Defense Minerals Exploration Contract, number Idm-E 339:

LEASE	DRILL HOLE NO.	REMARKS
Clarence P.Ralph,	10	Low grade marcasite mineralization from 175 to 182.5 feet depth.
Clarence P. Ralph,	11	Assays from 130 to 170 feet depth averaged 7.09% ZnS and 23.44% FeS_2 and from 170-180 feet depth averaged 1.06% ZnS and 18.93% FeS_2.
Clarence P. Ralph,	12	Assays from 95 to 110 feet depth averaged 4.49% ZnS and 5.27% FeS_2, and from 162.5 to 172.5 feet depth averaged 9.22% ZnS and 17.28% FeS_2. Between this hole and drill hole number 33 on the Frances Calvert lease the orebody is 165 feet wide.
Clarence P. Ralph,	13	Low grade marcasite mineralization from 80 to 160 feet depth and traces of galena from 140 to 160 feet depth.
Clarence P. Ralph,	14	Fair marcasite mineralization from 70 to 165 feet depth
Clarence P. Ralph,	15	Rich blende mineralization from 150 to 172.5 feet depth. Ground broken and open from 140 to 175 feet depth. Mineralization below 177.5 feet depth is believed to have largely caved from above.

15

LEASE	DRILL HOLE NO.	REMARKS
Clarence P. Ralph,	16	Rich marcasite mineralization from 120 to 185 feet depth. Fair to low grade blende mineralization from 150 to 165 feet depth. Mineralization below 165 feet depth is believed to have largely caved from above. Loose open hole from 120 to 160 feet depth.
Clarence P. Ralph,	17	Fair marcasite mineralization from 130 to 160 feet depth. Traces of blende from 165 to 180 feet depth.

Sincerely,

THE EAGLE-PICHER COMPANY.

By. J. P. Lyden
J. P. Lyden,
Chief Geologist,
Mining & Smelting Div.

JPL/tp.

THE [illegible]-FICHER COMPANY URBANA, ILLINOIS

DRILLING UNDER [illegible] - OCTOBER, 1953

	Hole No.	Footage Drilled
Project No. 2		
Clarence E. Ralph	10	210
"	11	182
	12	200
"	13	202
	14	202
"	15	197
	16	135
"	17	190

15

Total footage drilled October - 1968 feet

Drilling cost - 1568 feet @ 1.565 per foot	$2,453.92
Plugging 8 holes @ $5.00 each	40.00
* Chief Geologist 1 month 8/14 of $425.00	242.86
* Field " 1 " 8/14 of $397.00	226.86
Total cost month of October, 1953	$2,963.64

* Note:-14 holes used as a normal month for salary overhead--October 8 holes--8/14 of salaries

DEPARTMENT OF THE INTERIOR
Bureau Mines Mineral Administration
RECEIVED
DEC 4 - 1953

WORK PROGRESS REPORT

Docket 2399 Month October

Contract Idm E-339 Company Eagle-Picher Co.

Property East of Cuba City

DRILLING - The following holes were completed this period:

Lease	Hole	Date started	Date completed	Depth
Clarence P. Ralph	10	10/ 1/53	10/ 5/53	210
" " "	11	10/ 6/53	10/ 8/53	182
" " "	12	10/ 8/53	10/13/53	200
" " "	13	10/13/53	10/15/53	202
" " "	14	10/15/53	10/20/53	202
" " "	15	10/20/53	10/23/53	197
" " "	16	10/23/53		185
" " "	17	10/28/53	10/30/53	190

The following holes were in progress this period, but not completed:

Lease	Hole	Date started	Footage reported	Remarks
Clarence P. Ralph	18	10/30/53	70	

TOTAL (completed)(~~[illegible]~~) footage this period 1568 To date 31,355.5
scratch one

DRIFTING AND CROSSCUTTING - Headings were advanced as follows:

Name and location	Average cross-section	Advance From-	Advance To-	Advance for period	Total advance to date	Remarks

TRENCHING AND TEST PITTING - The following excavations were in progress this period:

Name and location	Cubic yards this period	Cubic yards to date	Linear feet this period	Linear feet to date	Remarks

OTHER MAJOR WORK -

All work was performed in a satisfactory manner and the attached Form MF-104, Monthly Report, constituting certified invoice, rendered by the contractor under date of November 16, 19 53, totalling $ 60,607.79, has been carefully checked and approved by me.

APPROVED BY:

Wesley A Rush
Mining Engineer ~~xxxxxxxxxx~~

W. A. Broughton
~~xxxxxxxxxxxxxx~~ Geologist

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

Wash

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of September, 1953 Docket No. DMEA 2399 Contract No. Idm 339
Operator's Name THE EAGLE-PICHER CO. Minerals Lead & Zinc
Address GALENA, ILLINOIS
Contract Amount, $ 191,230.78 Government Participation: 50 % Amount, $ 95,615.39

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Contracts:						
Drilling	2493.62	44973.83	47467.45	2493.62	44,973.83	47,467.45
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	411.00	9765.70	10176.70	411.00	9,765.70	10,176.70
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	2904.62	54739.53	57644.15	2904.62	54,739.53	57,644.15

I certify that the above bill is correct and just and that payment therefor has not been received.

Date Oct. 19, 1953 *Payee THE EAGLE-PICHER CO.

Per A. G. Tompkins Title Plant Accountant

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 1452.31 AB

Signature L. A. Hill
(Authorized Certifying Officer)

Date OCT 29 1953 Vou. No. 12
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. DM E339 in accordance with the terms of the contract.

Signature Wesley A. Brock Title Mining Engineer Date 10/28/53

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature D. B. Woodham Title Ex Off Date 10/28/53

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 12 1953

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of September 1953 Docket No. DMEA 2399 Contract No. Idm 2 339
Operator's Name THE EAGLE-PICHER COMPANY Minerals Lead & Zinc
Address GALENA, ILLINOIS

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core					29787.5			
Churn	foot	2904.62	1571	57,644.15	29787.5	1.935		
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		2904.62		57,644.15				191,230.78

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date Oct. 19, 1953 Operator THE EAGLE-PICHER CO.

Per A. G. Tompkins Title Plant Accountant

REMARKS:

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

U. S. GOVERNMENT PRINTING OFFICE 205676

THE EAGLE-PICHER COMPANY GALENA, ILLINOIS

DRILLING UNDER DMEA CONTRACT - SEPTEMBER, 1953

	Hole No.	Footage Drilled
Project No. 2		
Francis M. Calvert	44	243
	45	220
	46	207
	47	202
	48	215
	8	242
	9	242
Total Footage drilled in September		1571 ft

Drilling Cost - 1571 ft @ $1.565 per foot	$2,458.62
Plugging seven holes @ $5.00 each	35.00
* Chief Geologist 1 mo @ 7/14 of $425.00	212.50
* Field " 1 mo @ 7/14 of $397.00	198.50
Total Cost month of September, 1953	$2,904.62

* 14 holes used as a normal month for salary overhead. September -7 holes--7/14 of salaries

THE EAGLE-PICHER COMPANY
MINING AND SMELTING DIVISION
GEOLOGICAL DEPARTMENT
CARDIN, OKLAHOMA

October 7,1953.

United States Department of Interior,
Defense Minerals Exploration Administration
Minneapolis, Minnesota.

ATT:MR. A. B. NEEDHAM.

Gentlemen:

The following is our summary of the drill holes that were drilled by The Eagle-Picher Company in LaFayette County, Wisconsin, during the month of September, 1953, under Defense Minerals Exploration Contract, number Idm-E 339:

LEASE	DRILL HOLE NO.	REMARKS
Francis M. Calvert,	44	Loose hole that caved badly. Rich iron mineralization most oxidized to limonite from 75 to 180 feet depth. No blende mineralization. This hole is part of same loose broken area as holes 10 & 14 to southeast.
Francis M. Calvert,	45	Good marcasite mineralization 60 to 75 feet depth and 160 to 215 feet depth. Traces and few specks of blende and galena in Oil Rock horizon from 210 to 217.5 feet depth.
Francis M. Calvert,	46	Good marcasite mineralization from 75 to 200 feet depth. Few specks of blende and galena in Oil Rock horizon.
Francis M. Calvert,	47	Good marcasite mineralization from 135 to 202 feet depth. No blende mineralization. This drill hole indicates an unusually wide zone of marcasite mineralization in which the zinc mineralization has disappeared to the north.
Francis M. Calvert,	48	Loose open barren hole with only traces to 2% of marcasite mineralization in Gray and Blue horizons.

LEASE	DRILL HOLE NO.	REMARKS
Clarence P. Ralph,	8	Fair marcasite mineralization from 120 to 140 feet depth and from 185 to 215 feet depth. Fair blende mineralization from 225 to 235 feet depth.
Clarence P. Ralph,	9	Low grade to fair marcasite mineralization from 200 to 240 feet depth. Low grade blende mineralization in Oil Rock horizon from 227½ to 237½ feet depth.

Sincerely,

THE EAGLE-PICHER COMPANY.

By. J. P. Lyden
J. P. Lyden,
Chief Geologist,
Mining & Smelting Div.

JPL/tp.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
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WORK PROGRESS REPORT

Docket 2399

Month September 1953

Contract Idm E-339

Company Eagle-Picher Co.

Property East of Cuba City

DRILLING - The following holes were completed this period:

Lease	Hole	Date started	Date completed	Depth
F. Calvert	44	8/31/53	9/ 3/53	243
" "	45	9/ 4/53	9/ 9/53	220
" "	46	9/ 9/53	9/11/53	207
" "	47	9/14/53	9/16/53	202
" "	48	9/17/53	9/22/53	215
Clarence P. Ralph	8	9/23/53		242
" " "	9	9/25/53	9/30/53	242

The following holes were in progress this period, but not completed:

Lease	Hole	Date started	Footage reported	Remarks

- None -

TOTAL (completed)(~~accumulated~~) footage this period 1571 To date 29,787.5
scratch one

DRIFTING AND CROSSCUTTING - Headings were advanced as follows:

Name and location	Average cross-section	Advance From-	Advance To-	Advance for period	Total advance to date	Remarks

TRENCHING AND TEST PITTING - The following excavations were in progress this period:

Name and location	Cubic yards this period	Cubic yards to date	Linear feet this period	Linear feet to date	Remarks

OTHER MAJOR WORK -

All work was performed in a satisfactory manner and the attached Form MF-104, Monthly Report, constituting certified invoice, rendered by the contractor under date of October 19, 19 53, totalling $ 57,644.15 to date, has been carefully checked and approved by me.
2,904.62 this voucher

APPROVED BY:

Wesley A. Kurk
Mining Engineer ~~or Geologist~~

W. A. Broughton
~~Mining Engineer or~~ Geologist

Form M-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of August, 1953 Docket No. DMEA 2399 Contract No. Idm B 339
Operator's Name THE EAGLE PICHER CO. Minerals Lead & Zinc
Address GALENA, ILLINOIS
Contract Amount, $191,230.78 Government Participation: 50 % Amount, $95,615.39

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) ~~Independent~~ Short Form Contracts:						
Drilling	2141.18	42832.65	44,973.83	2141.18	42832.65	44,973.83
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	352.28	9413.42	9,765.70	352.28	9413.42	9,765.70
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	2493.46	52,246.07	54,739.53	2493.46	52,246.07	54,739.53

I certify that the above bill is correct and just and that payment therefor has not been received.

Date Sep 14, 1953 *Payee The Eagle-Picher Co.

Per A G Dompkins Title Plant Accountant

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 1246.73 HO

Signature L. A. Hill
(Authorized Certifying Officer)

Date SEP 28 1953 Vou. No. 9
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm.-E 332 in accordance with the terms of the contract.

Signature K. J. Schroeder Title Mining Engineer Date 9-24-53

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature D. B. Needham Title Ex Off Date 9/26/53

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Bureau Mines Washington
RECEIVED
SEP 30 1953

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OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of August 1953 Docket No. DMEA 2399 Contract No. 10m 2339
Operator's Name BOOLE-PICHER COMPANY Minerals Lead & Zinc
Address DALNA, ILLINOIS

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core					* 28216.5			
Churn	Foot	2493.46	1349	54,739.53	28216	1.940		
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		2493.46		54,739.53				$191,230.78

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date Sept. 14, 1953 Operator The Boole-Picher Co.

Per A. G. Tompkins Title Plant Accountant
A. G. Tompkins

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

REMARKS:

(Instructions on reverse)

(For Government use only)

* Previous Units to date = 26867.5
+1349.0
28216.5

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

U. S. GOVERNMENT PRINTING OFFICE 205676

THE EAGLE-PICHER COMPANY GALENA, ILLINOIS

DRILLING UNDER DMEA CONTRACT - AUGUST, 1953

	Hole No.	Footage Drilled
Project No. 2		
Francis M. Calvert	38	225
	39	230
	40	210
	41	227
	42	230
	43	227
Total footage drilled in August		1349 ft

Drilling Cost--1349 feet @ $1.565	$2,111.18
Plugging six holes @ $5.00 each	30.00
* Chief Geologist 1 mo. @ 6/14 of $425.00	182.14
* Field " 1 mo. " $397;00	170.14
Total Cost month of August, 1953	$2,493.46

* Note: 14 holes used as a normal month for Salary overhead. August-6 holes--6/14 of salaries

THE EAGLE-PICHER COMPANY
MINING AND SMELTING DIVISION
GEOLOGICAL DEPARTMENT
CARDIN, OKLAHOMA

September 1,1953

United States Department of Interior,
Defense Minerals Exploration Administration
Minneapolis, Minnesota.

ATT: MR. A. B. NEEDHAM.

Gentlemen:

The following is our summary of the drill holes that were drilled by The Eagle-Picher Company in LaFayette County, Wisconsin, during the month of August, 1953, under Defense Minerals Exploration Contract, number Idm-E 339:

LEASE	DRILL HOLE NO.	REMARKS
Francis M. Calvert,	38	Fair blende mineralization in Oil Rock and Clay bed horizons for a thickness of 10 feet. Rich marcasite mineralization from 207½ to 225 feet depth.— Oil Rock to McGregor horizons.
Francis M. Calvert,	39	Fair marcasite mineralization from 140 to 215 feet depth. Traces and low grade blende mineralization at intervals from 197.5 to 230 feet depth- Gray to McGregor horizons.
Francis M. Calvert,	40	Low grade marcasite mineralization from 100 to 115 feet depth and from 155 to 170 feet depth. Traces of blende from 200-210 feet depth in Oil Rock and Clay Bed horizons.
Francis M. Calvert,	41	Rich marcasite mineralization from 165-225 feet depth. Little blende mineralization in Gray horizon from 205-210 feet depth.
Francis M. Calvert,	42	Fair marcasite mineralization from 105 feet, near top of Drab, to 230 feet depth at bottom of hole. Low grade blende mineralization at 155-165 feet depth in Drab horizon. Traces of blende in Gray horizon.

LEASE	DRILL HOLE NO.	REMARKS
Francis M. Calvert,	43	Low grade marcasite mineralization from 140 - 192.5 feet depth. Traces of blende in Oil Rock, Clay Bed, and Glass Rock horizons.

9

Sincerely,

THE EAGLE-PICHER COMPANY.

By. J. P. Lyden

J. P. Lyden,
Chief Geologist,
Mining & Smelting Div.

JPL/tp.

DIVISION OF THE MINERAL
Defense Materials Administration
RECEIVED
SEP 30 1953

9

WORK PROGRESS REPORT

Docket 2399

Contract Idm-E339

Month August 1953

Company Eagle-Picher Co.

Property East of Cuba City

DRILLING - The following holes were completed this period:

Lease	Hole	Date started	Date completed	Depth
F. Calvert	38	8/ 1/53	8/ 5/53	225
" "	39	8/ 5/53	8/ 7/53	230
" "	40	8/8 /53	8/11/53	210
" "	41	8/11/53	8/14/53	227
" "	42	8/14/53	8/17/53	230
" "	43	8/17/53	8/20/53	227

The following holes were in progress this period, but not completed:

Lease	Hole	Date started	Footage reported	Remarks
F. Calvert	44	8/29/53	105	

TOTAL (completed)(~~accumulated~~) footage this period 1349 To date 28,216.5
scratch one

DRIFTING AND CROSSCUTTING - Headings were advanced as follows:

Name and location	Average cross-section	Advance From-	Advance To-	Advance for period	Total advance to date	Remarks

TRENCHING AND TEST PITTING - The following excavations were in progress this period:

Name and location	Cubic yards this period	Cubic yards to date	Linear feet this period	Linear feet to date	Remarks

OTHER MAJOR WORK -

All work was performed in a satisfactory manner and the attached Form MF-104, Monthly Report, constituting certified invoice, rendered by the contractor under date of Sept. 14, 19 53, totalling $ 2493.46, has been carefully checked and approved by me.

APPROVED BY:

W. J. Schroeder
Mining Engineer ~~xxxGeologistx~~

W. A. Broughton
~~xxxMining Engineerxxx~~ Geologist

Form MF-104 (Rev.)
(April 1952)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of July, 1953, 195____ Docket No. DMEA 2399 Contract No. Idm B 339
Operator's Name The Eagle-Picher Co. Minerals Lead & Zinc
Address P. O. Box 1040, Galena, Illinois
Contract Amount, $ 191,230.78 Government Participation: 50 % Amount, $ 95,615.39

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) [redacted] Short Form Contracts:						
Drilling	2265.13	40,567.52	42,832.65	2265.13	40,567.52	42,832.65
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	411.00	9,002.42	9,413.42	411.00	9,002.42	9,413.42
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	2676.13	49,569.94	52,246.07	2676.13	49,569.94	52,246.07

I certify that the above bill is correct and just and that payment therefor has not been received.
Date 8/15/53 *Payee The Eagle-Picher Co.
Per A. G. Tomplins Title Plant Accountant

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:
$ 1338.06
Signature L. A. Hill
(Authorized Certifying Officer)
Date SEP - 1 1953 Vou. No.
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Ida E 332 in accordance with the terms of the contract.

Signature W. J. Schroeder Title Mining Engineer Date 8-21-53

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature A B Needham Title Ex Off Date 8/27/53

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2), include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of July 1953 Docket No. DMEA [illegible] Contract No. [illegible]
Operator's Name The [illegible]-Fisher Co. Minerals [illegible]
Address [illegible] Mo [illegible], Illinois

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn	Foot	2676.13	1867	[illegible]	26307.9	1.[illegible]		
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		2676.13		[illegible]				

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date Aug. 15, 1953 Operator The [illegible]-Fisher Co.

Per A C Tompkins Title Plant Accountant
[illegible] Companies

REMARKS:

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

U. S. GOVERNMENT PRINTING OFFICE 205676

THE EAGLE-PICHER COMPANY GALENA, ILLINOIS

DRILLING UNDER EMA CONTRACT - JULY, 1953

	Hole No.	Footage Drilled
Project No. 2		
Francis W. Calvert	33	185
"	34	218.5
"	35	205
"	36	207.5
"	37	218
Clarence P. Ralph	6	180
"	7	211
Total footage drilled in July		1425

Drilling Cost--1425 ft @ 1.565 per foot	$2,230.13
Plugging 7 holes @ 5.00 each	35.00
* Chief Geologist 1 mo. 7/14 of 425.00	212.50
Field " 1 mo. 7/14 of 397.00	198.50
Total Cost month of July, 1953	$2,676.13

* Note: 14 holes used as a normal month for salary overhead. July-7 holes--7/14

THE EAGLE-PICHER COMPANY
MINING AND SMELTING DIVISION
GEOLOGICAL DEPARTMENT
CARDIN, OKLAHOMA

August 4, 1953.

United States Department of Interior,
Defense Minerals Exploration Administration
Minneapolis, Minnesota.

ATT: MR. A. B. NEEDHAM

Gentlemen:

The following is our summary of the drill holes that were drilled by The Eagle-Picher Company in LaFayette County, Wisconsin, during the month of July, 1953, under Defense Minerals Exploration Contract, number Idm-E 339:

LEASE	DRILL HOLE NO.	REMARKS
Francis M. Calvert,	33	Rich ore. Average of assays for samples from 115 to 170 feet depth is 10.76 per cent blende. Hole caved badly from the Blue horizon and salted the cuttings from 170 to 185 feet depth. Assays below 170 feet are unreliable.
Francis M. Calvert,	34	Marcasite mineralization from 150 to 205 feet depth. No blende. Broken ground and loose from 140 to 195 feet.
Francis M. Calvert,	35	Good blende mineralization from 170 to 177.5 feet depth. Good marcasite mineralization from 145 to 185 feet depth.
Francis M. Calvert,	36	Good blende mineralization in Gray horizon from 180 to 185 feet depth. Hole caved badly in Gray horizon and ravellings salted hole to bottom. Hole broken and loose from 105 to 187.5 feet depth.
Francis M. Calvert,	37	Fair blende mineralization in Oil Rock horizon from 205 to 212 feet depth. Fair marcasite mineralization from 100 to 215 feet depth.

LEASE	DRILL HOLE NO.	REMARKS
Clarence P. Ralph,	6	Mineralization from 130 to 160 feet depth averages 3.24 per cent blende. Thin beds in Oil Rock and Glass Rock horizons.
Clarence P. Ralph,	7	Fair marcasite mineralization with traces of blende from 170 to 195 feet depth. Thin beds in Oil Rock and Glass Rock horizons.

Sincerely,

THE EAGLE-PICHER COMPANY.

BY. J. P. Lyden

J. P. Lyden,
Chief Geologist
Mining & Smelting Div.

JPL/tp.

WORK PROGRESS REPORT

Docket 2399

Contract Idm-E 339

Month July 1953

Company Eagle-Picher Company

Property East of Cuba City

DRILLING - The following holes were completed this period:

Lease	Hole	Date started	Date completed	Depth
F. Calvert	33	6/30/53	7/ 6/53	185
" "	34	7/14/53	7/17/53	218½
" "	35	7/17/53	7/22/53	205
" "	36	7/22/53	7/27/53	207½
" "	37	7/27/53	7/29/53	218
C. Ralph	6	7/ 6/53	7/ 8/53	180
" "	7	7/ 9/53	7/13/53	211

The following holes were in progress this period, but not completed:

Lease	Hole	Date started	Footage reported	Remarks

None in Progress.

TOTAL (completed) ~~(accumed)~~ footage this period 1425 To date 26,867½
scratch one

DRIFTING AND CROSSCUTTING - Headings were advanced as follows:

Name and location	Average cross-section	Advance From-	Advance To-	Advance for period	Total advance to date	Remarks

TRENCHING AND TEST PITTING - The following excavations were in progress this period:

Name and location	Cubic yards this period	Cubic yards to date	Linear feet this period	Linear feet to date	Remarks

OTHER MAJOR WORK -

All work was performed in a satisfactory manner and the attached Form MF-104, Monthly Report, constituting certified invoice, rendered by the contractor under date of August 15, 19 53, totalling $ 2676.13, has been carefully checked and approved by me.

APPROVED BY:

H. J. Schroeder
Mining Engineer ~~or Geologist~~

W. A. Brownlow
~~Mining Engineer or~~ Geologist

Form MIN-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S MONTHLY REPORT AND VOUCHER

3

Month of June, 195[illegible] Docket No. DMEA [illegible] Contract No. [illegible]
Operator's Name [illegible] Minerals [illegible]
Address [illegible]
Contract Amount, $[illegible] Government Participation: [illegible]% Amount, $[illegible]

ITEMS OF COST'S	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) ~~Undercutter~~ Short Form Contracts:						
Drilling	[illegible]	37,733.69	40,567.52	2833.83	37,733.69	40,567.52
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	[illegible]	[illegible]	[illegible]	528.42	8,474.00	9,002.42
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	[illegible]	[illegible]	[illegible]	3362.25	46,207.69	49,569.94

I certify that the above bill is correct and just and that payment therefor has not been received.

Date [illegible] *Payee [illegible]

Per A. C. Dompkins Title [illegible]

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 1681.12

Signature [illegible]
(Authorized Certifying Officer)

Date JUL 30 1953 Vou. No.
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm-E 339 in accordance with the terms of the contract.

Signature H. J. Schroeder Title Mining Engineer Date 7-28-53

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature D. B. Needham Title Ex Off Date 7/29/53

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 3 1953

3

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of June, 1953 Docket No. DMEA [illegible] Contract No. [illegible]
Operator's Name [illegible] Minerals [illegible]
Address [illegible]

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]		
Auger					[illegible]	[illegible]		
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		[illegible]		[illegible]				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc								
TOTAL COSTS		[illegible]		[illegible]				

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date [illegible] Operator [illegible]

Per A. C. Dampling Title [illegible]

REMARKS:

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

U. S. GOVERNMENT PRINTING OFFICE 205676

THE EAGLE PICHER COMPANY GALENA, ILLINOIS

DRILLING UNDER DBA CONTRACT 0 J 5, 1953

	Hole No.	Footage Drilled
Project No. 2		
Francis E. Calvert	24	177.5
"	25	195
"	26	195
	27	210
"	28	202.5
"	29	220
"	30	225
"	31	175
"	32	182
Total footage drilled-June		1782

Drilling Cost--1782 ft. @ $1.565 per foot		$2,788.83
Plugging 9 holes @ $5.00		45.00
*Chief Geologist one month 9/14 of	$425.00	273.21
*Field " "	397.00	255.21
Total Cost month of June, 1953		3,362.25

*14 holes used as a normal month for salary overhead

THE EAGLE-PICHER COMPANY
MINING AND SMELTING DIVISION
GEOLOGICAL DEPARTMENT
CARDIN, OKLAHOMA

July 7th., 1953.

United States Department of Interior,
Defense Minerals Exploration Administration
Minneapolis, Minnesota.

ATT: MR. A.B.NEEDHAM

Gentlemen:

The following is our summary of the drill holes that were drilled by The Eagle-Picher Company in LaFayette County, Wisconsin, during the month of June, 1953, under Defense Minerals Exploration Contract, number Idm-E 339:

LEASE	DRILL HOLE NO.	REMARKS
Francis M. Calvert,	24	There is good marcasite mineralization from 50 feet to 75 feet depth that average 11.97% FeS_2, traces of blende averaged 0.06% and low grade galena averaged 0.30% PbS. This drill hole is in the north outer edge of the mineralized area.
Francis M. Calvert,	25	There is good marcasite mineralization from 115 feet to 165 feet depth that was estimated to average 9.9% FeS_2. This drill hole is approximately 75 feet south of the orebody.
Francis M. Calvert,	26	This drill hole is on the north edge of the orebody. From 65 feet to 125 feet depth the assays average 0.66% blende, 11.14% FeS_2 and 0.11% PbS, and from 170 feet to 187.5 feet depth the assays average 1.37% blende, 8.71% FeS_2 and 0.15% galena.

LEASE	DRILL HOLE NO.	REMARKS
Francis M. Calvert,	27	In the upper part of the Drab horizon from 80 feet to 90 feet depth the blende mineralization averages 9.04% and the galena 0.31%. In the Gray, Blue and Oil Rock horizons from 165 feet to 192.5 feet depth the blende averages 4.10% and the galena 0.13%.
Francis M. Calvert,	28	In the lower part of the Drab and the top half of the Gray horizons from 160 feet to 175 feet depth the blende averages 1.78% and the galena 0.09%.
Francis M. Calvert,	29	Good blende mineralization in Oil Rock horizon. Rich marcasite with some blende from 145 feet to 175 feet depth. Blende in Glass Rock and McGregor horizons believed to be ravelling from Oil Rock horizon.
Francis M. Calvert,	30	Marcasite mineralization from 165 feet to 185 feet depth estimated to average 5.7% FeS_2. No blende mineralization.
Francis M. Calvert,	31	Good marcasite mineralization from 90 feet to 162.5 feet depth, with low grade blende mineralization.
Francis M. Calvert,	32	Rich blende in Blue and Oil Rock horizons. Blende in McGregor horizon believed to be ravelling from above.

Sincerely,

THE EAGLE-PICHER COMPANY.

By. J. P. Lyden

J. P. Lyden,
Chief Geologist,
Mining & Smelting Div.

JPL/tp.

WORK PROGRESS REPORT

Docket 2399 Month June 1953

Contract Idm E-339 Company Eagle-Picher Company

Property East of Cuba City

DRILLING - The following holes were completed this period:

Lease	Hole	Date started	Date completed	Depth
F. M. Calvert	24	5/28/53	5/30/53	177½
" " "	25	6/ 1/53	6/3/53/	195
" " "	26	6/ 4/53	6/ 8/53	195
" " "	27	6/ 9/53	6/11/53	210
" " "	28	6/11/53	6/15/53	202½
" " "	29	6/16/53	6/18/53	220
" " "	30	6/18/53	6/23/53	225
" " "	31	6/23/53	6/25/53	175
" " "	32	6/26/53	6/30/53	182

The following holes were in progress this period, but not completed:

Lease	Hole	Date started	Footage reported	Remarks
F. M. Calvert	33	6/30/53	30	

TOTAL (completed) (~~xxxxxxx~~) footage this period 1782 To date 25,442½
scratch one

DRIFTING AND CROSSCUTTING - Headings were advanced as follows:

Name and location	Average cross-section	Advance From-	Advance To-	Advance for period	Total advance to date	Remarks

TRENCHING AND TEST PITTING - The following excavations were in progress this period:

Name and location	Cubic yards this period	Cubic yards to date	Linear feet this period	Linear feet to date	Remarks

OTHER MAJOR WORK -

All work was performed in a satisfactory manner and the attached Form MF-104, Monthly Report, constituting certified invoice, rendered by the contractor under date of July 20, 19 53, totalling $ 3362.25, has been carefully checked and approved by me.

APPROVED BY:

H. J. Schroeder
Mining Engineer ~~or Geologist~~

W. A. Broughton
~~Mining Engineer or~~ Geologist

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 22-R1036.3.
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of May 1953 Docket No. DMEA 8999 Contract No. Idn 8.39
Operator's Name The Eagle-Picher Co. Minerals Lead & Zinc
Address Galena, Illinois
Contract Amount, $191,230.78 Government Participation 50 % Amount, $95,615.39

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) ~~Independent~~ Short Form Contracts:						
Drilling	2119.58	35614.11	37733.69	2119.58	35614.11	37733.69
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	411.00	8063.00	8474.00	411.00	8063.00	8474.00
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	2530.58	43677.11	46207.69	2530.58	43677.11	46207.69

I certify that the above bill is correct and just and that payment therefor has not been received.
Date June 17, 1953 Payee The Eagle-Picher Co.
Per A C Tompkins Title Plant Accountant

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 1265.29 HO

Signature L. A. Hice
(Authorized Certifying Officer)

Date JUN 23 1953 Vou. No.
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. DMEA 339 in accordance with the terms of the contract.

Signature W. J. Schneider Title Mining Engineer Date 6/22/53

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature [illegible] Title [illegible] Date 6/23/53

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of May 1953 Docket No. DMEA 339 Contract No. DMEA 339
Operator's Name The Keweenaw Co.
Address Iron, Illinois
Minerals Lead & Zinc

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core	foot	2530.53	1332	46207.69	23660.5	1.953		
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		2530.53		46207.69				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		2530.53		46207.69				191,230.75

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date June 17, 1953 Operator The Keweenaw Co.

Per A. G. Tompkins Title Cost Accountant

REMARKS:

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

U. S. GOVERNMENT PRINTING OFFICE 205676

THE EAGLE-PICHER COMPANY GALENA, ILLINOIS

DRILLING UNDER DMEA CONTRACT - MAY, 1953

	Hole No.	Footage Drilled
Project #2		
Francis J. Calvert	17	197
"	18	180
"	19	185
"	20	200
"	21	197
"	22	188
"	23	185
Total Footage Drilled May		1332

Drilling Cost 1332 ft @ $1.565 per foot	$2,084.58
Plugging 7 holes @ $5.00	35.00
*Chief Geologist one month 7/14 of $425.00	212.50
*Field " " " 7/14 of $397.00	198.50
Total Cost month of May, 1953	$2,530.58

*14 holes used as a normal month for salaryoverhead

THE EAGLE-PICHER COMPANY
MINING AND SMELTING DIVISION
GEOLOGICAL DEPARTMENT
CARDIN, OKLAHOMA

June 1st., 1953.

United States Department of Interior
Defense Minerals Exploration Administration,
Minneapolis, Minnesota.

ATT: MR. A. B. NEEDHAM.

Gentlemen:

The following is our summary of the drill holes that were drilled for the Eagle-Picher Company in LaFayette County, Wisconsin, during the month of May, 1953, under Defense Minerals Exploration Contract, number Idm-E 339:

LEASE	DRILL HOLE NO.	REMARKS
Francis M. Calvert,	17	Much marcasite and good blende mineralization in bottom 20 feet of Drab horizon and in Blue horizon. Average of blende assays from 140-160 feet depth- 5.31% ZnS, and from 170-187.5 feet depth- 5.92 % ZnS.
Francis M. Calvert,	18	Low grade marcasite mineralization and open ground in Gray horizon. Only traces of blende in Gray, Blue and Oil Rock horizons. Thin Oil Rock and Glass Rock horizons.
Francis M. Calvert,	19	Thin Oil Rock and Glass Rock horizons. Traces of galena from 20-80 feet depth. Some open ground in Drab & Gray horizons.
Francis M. Calvert,	20	Assays from 140 to 160 feet depth in Drab horizon average 3.28% ZnS and 10.97% FeS_2. Low grade blende and marcasite mineralization from 125 to 140 and 160 to 185 feet depth.

NAME	DRILL HOLE NO.	REMARKS
Francis M. Calvert,	21	Rich blende and marcasite mineralization in Blue, Oil Rock & Glass Rock horizons. Blue horizon caved and salted hole from 192½ to 197 feet depth. (These assays will not be used). Assays from 175 to 192.5 feet depth average 17.01% ZnS and 35.50% FeS_2. Marcasite and low grade mineralization from 110 to 175 feet depth.
Francis M. Calvert,	22	Spotty low grade blende mineralization in Drab horizon from 95 to 150 feet depth. Blende mineralization in top of Gray from 150-157.5 feet depth. Average assay 10.78 % ZnS. This hole is on east edge of ore-body.
Francis M. Calvert,	23	Spotty low grade blende mineralization from 95 to 105 and 135 to 172.5 feet depth. Much open ground and most of drill cuttings lost in Gray and Blue horizons.

Sincerely,

THE EAGLE-PICHER COMPANY.

By. J. P. Lyden

J. P. Lyden,
Chief Geologist,
Mining & Smelting Div.

JPL/tp.

WORK PROGRESS REPORT

Docket 2399

Contract Idm E-339

Month May 1953

Company Eagle-Picher Company

Property East of Cuba City

DRILLING - The following holes were completed this period:

Lease	Hole	Date started	Date completed	Depth
F.H. Calvert	17	5/ 1/53	5/ 5/53	197
" " "	18	5/ 6/53	5/ 8/53	180
" " "	19	5/ 9/53	5/12/53	185
" " "	20	5/12/53	5/15/53	200
" " "	21	5/15/53	5/19/53	197
" " "	22	5/20/53	5/22/53	188
" " "	23	5/25/53	5/28/53	185

The following holes were in progress this period, but not completed:

Lease	Hole	Date started	Footage reported	Remarks

None Reported

TOTAL (completed)(~~abandoned~~) footage this period 1,332 To date 23,660½
scratch one

DRIFTING AND CROSSCUTTING - Headings were advanced as follows:

Name and location	Average cross-section	Advance From-	Advance To-	Advance for period	Total advance to date	Remarks

TRENCHING AND TEST PITTING - The following excavations were in progress this period:

Name and location	Cubic yards this period	Cubic yards to date	Linear feet this period	Linear feet to date	Remarks

OTHER MAJOR WORK -

All work was performed in a satisfactory manner and the attached Form MF-104, Monthly Report, constituting certified invoice, rendered by the contractor under date of June 17, 19 53, totalling $ 2530.58, has been carefully checked and approved by me.

APPROVED BY:

W. J. Schroeder
Mining Engineer ~~Geologist~~

W. A. Broughton
~~Mining Engineer~~ Geologist

Form MF-194 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

Wash

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of April 1953 Docket No. DMEA 2399 Contract No. Idm 339
Operator's Name The Doe-Picher Co. Minerals Lead & Zinc
Address Galena, Illinois
Contract Amount, $ 191,239.78 Government Participation: 50 % Amount, $ 95,619.39

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Short Form Contracts:						
Drilling	2878.22	32735.89	35614.11	2878.22	32735.89	35614.11
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	822.00	7241.00	8063.00	822.00	7241.00	8063.00
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase	** Adjusted March Totals			** Adjusted March Totals		
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	3700.22	39976.89	43677.11	3700.22	39976.89	43677.11

I certify that the above bill is correct and just and that payment therefor has not been received.
Date May 28, 1953 *Payee The Doe-Picher Co.
Per A. G. Zumpline Title Plant Accountant

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 1850.11

Signature L. A. Hill
(Authorized Certifying Officer)

Date JUN - 3 1953 Vou. No.
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E 339 in accordance with the terms of the contract.

Signature H. J. Schroeder Title Mining Engineer Date 6/1/53

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature C. B. Wadham Title Ex M Date 6/2/53

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

40

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of April 1953 Docket No. DMEA 2399 Contract No. Idm E 339

Operator's Name The Eagle-Picher Co. Minerals Lead & Zinc

Address Galena, Illinois

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn	Foot	3700.22	1738	43677.11	22328.5	1.956		
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		3700.22		43677.11				191230.78

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date May 28, 1953 Operator The Eagle-Picher Co.

Per A. G. Dompelmann Title Plant Accountant

A. G. Dompelmann

REMARKS:

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

U. S. GOVERNMENT PRINTING OFFICE 205676

THE EAGLE-PICHER COMPANY
MINING AND SMELTING DIVISION
GEOLOGICAL DEPARTMENT
CARDIN, OKLAHOMA

May 8th., 1953.

United States Department of the Interior,
Defense Minerals Exploration Administration,
Minneapolis, Minnesota.

ATT: MR. A. B. NEEDHAM.

Gentlemen:

The following is our summary of the drill holes that were drilled for the Eagle-Picher Company in LaFayette County, Wisconsin, during the month of April, 1953, under Defense Minerals Exploration Contract, number Idm-E 339:

LEASE	DRILL HOLE NO.	REMARKS
Fred W. Wilkinson,	8	Hole loose and caved between 65 and 73 feet depth. Thick Oil Rock horizon. Fair marcasite mineralization in Glass Rock horizon.
Fred W. Wilkinson,	9	Thick Oil Rock horizon. Only traces of marcasite mineralization.
Fred W. Wilkinson,	10	Soft muddy hole, loose and open from 20 feet to bottom. Caved after 4 feet of Glass Rock horizon had been cut. Only traces of marcasite. Few coarse crystals of blende at 72½ - 75 feet depth. Oxidized to 67½ feet depth. This immediate area is loose and oxidized to Blue horizon. Mining would be very costly in this immediate area.
Fred W. and J. Frank Wilkinson,	3	This hole could not be drilled the required depth and No. 4 was drilled 3 feet north of number 3.
Fred W. and J. Frank Wilkinson,	4	Only traces of marcasite were found in the cuttings from this hole. Thick Oil Rock and Glass Rock horizons.

LEASE	DRILL HOLE NO.	REMARKS
Fred W. and J. Frank Wilkinson,	5	Thick Oil Rock horizon. Top of Gray horizon at 60-67½ feet depth averaged 2.02% ZnS.
Fred W. and J. Frank Wilkinson,	6	Oil Rock horizon from 102½ to 105 feet depth averaged 1.5% ZnS and 4.84% PbS. Much open ground throughout hole.
Fred W. and J. Frank Wilkinson,	7	Only traces of marcasite found in cuttings. Hole caved badly. Oxidation to top of Blue horizon. Due to deep oxidation and loose cavey ground drill rig was moved away from this immediate area.
Fred W. and J. Frank Wilkinson,	8	Zinc mineralization that averaged 6.48% blende was cut in the Oil Rock and Glass Rock horizons at 70 to 85 feet depth.
Fred W. and J. Frank Wilkinson,	9	This hole is 50 feet west of number 8. At 80 to 82½ feet depth 3.85% ZnS and 2.42% PbS was cut in the Clay Bed horizon. The hole caved badly while drilling the Glass Rock horizon.
Fred W. and J. Frank Wilkinson,	10	This hole is 50 feet east of number 8. Oxidation extends into Blue horizon. Only traces of marcasite and blende were found in the Oil Rock and Glass Rock horizons.
Fred W. and J. Frank Wilkinson,	11	Thick Oil Rock and Glass Rock horizons. Oxidized to bottom of Drab horizon and partly oxidized in Gray and Oil Rock horizons. Traces of marcasite and specks of galena and blende below Drab horizon.
Fred W. and J. Frank Wilkinson,	12	Thick Oil Rock horizon. Oxidized to bottom of Drab horizon. Traces of marcasite and traces of blende and galena below Drab horizon. This hole indicated that drill holes numbers 1 and 8 on Fred W. and J. Frank Wilkinson are on same mineralized trend. This trend is

LEASE	DRILL HOLE NO.	REMARKS
Fred W. and J. Frank Wilkinson,	12 (Con't)	narrow, low grade and the height is limited to near the top of the Gray horizon due to oxidation. Loose open ground along this trend would make costly mining.
Clarence P. Ralph,	5	Thick Oil Rock and Glass Rock horizons. Fair marcasite mineralization from 70 to 100 feet depth. Much open ground from 60 to 100 feet depth.
Francis M. Calvert,	15	Low grade marcasite and traces of blende and galena mineralization from 45 to 80 feet depth.
Francis M. Calvert,	16	Rich marcasite and fair blende mineralization in Oil Rock horizon from 185 to 195 feet depth- average of assays 4.49% ZnS and 21.20% FeS_2. Much open ground from 110 to 182½ feet depth.

Sincerely,

THE EAGLE-PICHER COMPANY.

By. J. P. Lyden

J. P. Lyden,
Chief Geologist,
Mining & Smelting Division.

JPL/tp.

WORK PROGRESS REPORT

Docket 2399

Month April 1953

Contract Idm E-339

Company Eagle-Picher Company

Property East of Cuba City

DRILLING - The following holes were completed this period:

Lease	Hole	Date started	Date completed	Depth
C. P. Ralph	5	4/23/53	4/24/53	152½
F. M. Calvert	15	4/25/53	4/28/53	176
" " "	16	4/28/53	4/30/53	205
F. W. Wilkinson	8	4/ 4/53	4/ 6/53	127½
" " "	9	4/ 6/53	4/ 7/53	117½
" " "	10	4/18/53	4/18/53	85
F.W. & J.F.Wilkinson	3	abandoned		--
" " " " " "	4	4/ 8/53	4/ 9/53	105
" " " " " "	5	4/10/53	4/10/53	110
" " " " " "	6	4/11/53	4/13/53	117½
" " " " " "	7	4/13/53	4/14/53	125
" " " " " "	8	4/14/53	4/15/53	90
" " " " " "	9	4/16/53	4/17/53	92
" " " " " "	10	4/17/53	4/17/53	85
" " " " " "	11	4/20/53	4/21/53	105
" " " " " "	12	4/21/53	4/22/53	95

The following holes were in progress this period, but not completed:

Lease	Hole	Date started	Footage reported	Remarks

None reported in progress.

TOTAL (completed) ~~(started)~~ footage this period 1788 To date 22,328½
scratch one

DRIFTING AND CROSSCUTTING - Headings were advanced as follows:

Name and location	Average cross-section	Advance From-	Advance To-	Advance for period	Total advance to date	Remarks

TRENCHING AND TEST PITTING - The following excavations were in progress this period:

Name and location	Cubic yards this period	Cubic yards to date	Linear feet this period	Linear feet to date	Remarks

OTHER MAJOR WORK -

All work was performed in a satisfactory manner and the attached Form MF-104, Monthly Report, constituting certified invoice, rendered by the contractor under date of May 28, 19 53, totalling $ 3700.22, has been carefully checked and approved by me.

APPROVED BY:

H. J. Schroeder
Mining Engineer ~~xxxxxxxxxx~~

W. A. Broughton
~~xxxxxxxxxxxxxx~~ Geologist

THE EAGLE-PICHER COMPANY CARTERVILLE, ILLINOIS

DRILLING UNDER DMEA CONTRACT APRIL - 1953

	Hole No.	Footage Drilled	
Project No. 2			
Clarence F. Ralph	5	152.5	
Francis M. Calvert	15	176	
"	16	205	
Total Project No. 2			533.5
PROject No. 3			
Fred W. Wilkinson	8	127.5	
"	9	117.5	
"	10	85	
Fred W. & J. Frank Wilkinson	3	abandoned	
"	4	105	
"	5	110	
"	6	117.5	
"	7	125	
"	8	90	
"	9	92	
"	10	85	
"	11	105	
"	12	95	
Total Project No.3			1254.5
Total Footage drilled April			1788

Drilling Cost 1788 ft. @ $1.565 per foot	$2798.22
Plugging 16 holes @ $5.00	80.00
Chief Geologist one month	425.00
Field " one month	397.00
Total Cost month of April	$3700.22

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

35 Wash

APR 30 1953

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of [illegible] 195[illegible] Docket No. DMEA [illegible] Contract No. [illegible]
Operator's Name [illegible] Minerals [illegible]
Address [illegible]
Contract Amount, $[illegible] Government Participation: [illegible]% Amount, $[illegible]

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) [redacted] Short Form } Contracts:	[illegible]	[illegible]	[illegible]		XX	
Drilling		[illegible]		626.61	32,109.28	32,735.89
Bulldozing						
Crosscutting						
Drifting		[illegible]	[illegible]	[illegible]	XXAdjusted February totals	
(2) Labor and Supervision:						
Labor						
Supervision	[illegible]	[illegible]	[illegible]	117.00		
Technical Services				822.00	7,124.00	7,946.00
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives				only 2 holes drilled		
Pipe						
Track				1/7 of salaries allowed.		
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	[illegible]	[illegible]	[illegible]	743.61 / 1448.61	39,233.28	39,976.89 / 40,681.89

I certify that the above bill is correct and just and that payment therefor has not been received.

Date [illegible] *Payee [illegible]

Per A G Tompkins Title [illegible]

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 371.80 AG

Signature L. A. Hill
(Authorized Certifying Officer)

Date APR 27 1953 Vou. No.
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Flm E339 in accordance with the terms of the contract.

Signature W. J. Schroeder Title Mining Engineer Date 4/23/53

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature E. B. Needham Title Ex Off Date 4/24/53

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(*a*) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(*b*) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(*c*) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 30 1953

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of March 3 1953 Docket No. DMEA 2399 Contract No. DMEA 339
Operator's Name The Eagle-Picher Co. Minerals Lead - Zinc
Address Galena, Illinois

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core	foot	1440.61	334	40,681.09	20540.5	1.981		
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		1440.61		40,681.09				191,230.24

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date April 20, 1953 Operator The Eagle-Picher Co

Per A G Tompkins Title Plant Accountant

REMARKS:

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

U. S. GOVERNMENT PRINTING OFFICE 205676

THE EAGLE-PICHER COMPANY GALENA, ILLINOIS

DRILLING UNDER ERGA CONTRACT - MARCH, 1953

	Hole No.	Footage Drilled
Project #2		
Francis W. Calvert	14	254
Project #3		
Verna M. Cole (Tract #1)	16	140
Total footage drilled March		394

Drilling Cost 394 ft. @ $1.565	$ 616.61	
Plugging 2 holes @ $5.00	10.00	
Chief Geologist one month	425.00	60.50
Field " " "	397.00	56.52
	$1448.61	

April 1st.,1953.

United States Department of the Interior
Defense Minerals Exploration Administration,
Minneapolis, Minnesota.

ATT: MR. A. B. NEEDHAM.

Gentlemen:

The following is our summary of the respective drill holes that were drilled for the Eagle-Picher Company in LaFayette County, Wisconsin, during the month of March, 1953, under Defense Minerals Exploration Contract, Number Idm-E339:

LEASE	DRILL HOLE NO.	REMARKS
Francis M. Calvert,	14	This drill hole was very loose and open. No blende mineralization was noted and only a few traces of marcasite.
Verna B.Cole,	16	This was a solid hole with thick Oil Rock and Glass Rock beds. A few specks of galena were noted in the Drab horizon from 20 feet to 75 feet depth. Traces of marcasite were noted from 90 feet to 140 feet depth. This lease has been relinquished.

Very truly yours,

THE EAGLE-PICHER COMPANY.

By. J. P. Lyden
J. P. Lyden,
Chief Geolgist
Mining & Smelting Div.

JPL/tp.

WORK PROGRESS REPORT

Docket 2399 Month March 1953

Contract Idm E 339 Company Eagle-Picher Company

Property East of Cuba City

DRILLING - The following holes were completed this period:

Lease	Hole	Date started	Date completed	Depth
F.M. Calvert	14	2/26/53	3/ 5/53	254
V.B. Cole	16	3/ 3/53	3/ 5/53	140

The following holes were in progress this period, but not completed:

Lease	Hole	Date started	Footage reported	Remarks

None Reported

TOTAL (completed) ~~(accumulated)~~ footage this period 394 To date 20,540½
scratch one

DRIFTING AND CROSSCUTTING - Headings were advanced as follows:

Name and location	Average cross-section	Advance From-	Advance To-	Advance for period	Total advance to date	Remarks

TRENCHING AND TEST PITTING - The following excavations were in progress this period:

Name and location	Cubic yards this period	Cubic yards to date	Linear feet this period	Linear feet to date	Remarks

OTHER MAJOR WORK -

All work was performed in a satisfactory manner and the attached Form MF-104, Monthly Report, constituting certified invoice, rendered by the contractor under date of April 20, 19 53, totalling $ 1448.61, has been carefully checked and approved by me.

APPROVED BY:

K. J. Schroeder
Mining Engineer ~~or Geologist~~

W. A. Broughton
~~Mining Engineer or~~ Geologist

Form MF-104 (Rev.)
(April 1952)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

RECEIVED

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of February 195 3 Docket No. DMEA 2399 Contract No. Idm 339
Operator's Name The Eagle-Picher Co. Minerals Lead-Zinc
Address Galena, Illinois
Contract Amount, $ 191,230.78 Government Participation: 50% Amount, $ 95,615.39

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	2891.36	29,253.72	32,145.08	2855.56	29,253.72	32,109.28
Bulldozing						
Crosscutting				*See Attached Expense Sheet		
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	822.00	6,302.00	7,124.00	822.00	6,302.00	7,124.00
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	3713.36	35,555.72	39,269.08	3,677.56	35,555.72	39,233.28

I certify that the above bill is correct and just and that payment therefor has not been received.

Date Mar 20, 1953 *Payee The Eagle-Picher Co.

Per A. G. Dompkins Title Plant Accountant

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 1838.78

Signature L. A. Hill
(Authorized Certifying Officer)

Date MAR 30 1953 Vou. No.
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm E 339 in accordance with the terms of the contract.

Signature H. J. Schroeder Title Mining Engineer Date 3/27/53

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature E. B. Weddam Title [illegible] Date 3/30/53

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 6 1953

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of February 1953 Docket No. DMEA 2399 Contract No. Ida L 339
Operator's Name The Eagle-Picher Co. Minerals Lead-Zinc
Address Galena, Illinois

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core		* 367756		39 233.28		1.947		
Churn	ft	3713.36	1789.5	39,269.08	20146.5			
Auger						~~1.949~~		
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		3713.36		39,269.08				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		3713.36		39,269.08				191,230.78

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date Mar. 20, 1953 Operator The Eagle-Picher Co.

Per A. C. Hopkins Title Plant Accountant
A. C. Hopkins

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

REMARKS:

(Instructions on reverse)

(For Government use only)

* See Attached Expense Sheet - (WL)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

U. S. GOVERNMENT PRINTING OFFICE 205676

THE EAGLE-PICHER COMPANY GALENA, ILLINOIS

DRILLING UNDER DMEA CONTRACT - FEBRUARY, 1953

	Hole No.	Footage drilled	
Project #1			
Henry C. Gray	21	279.5	
"	22	279.5	
Total Project #1			559
Project #2			
Francis M. Calvert	11	238	
"	12	190.5	
"	13	196.5	
Total Project #2			625
Project #3			
Fred W. Wilkinson	5	80	
"	6	115	
"	7	90.5	
Fred W. & J. Frank Wilkinson	2	111	
Total Project #3			396.5
Project #4			
Fred Heim	8	100.5	
"	9	108.5	
Total Project #4			209
Total Footage Drilled February			1789.5

Drilling Cost 1789.5 feet @ $1.565	~~$2836.36~~	* 2,800.56
Plugging 11 holes @ $5.00	55.00	
Chief Geologist one month	425.00	
Field " " "	397.00	
Total cost month of February	~~$3713.36~~	3677.56

* Corrected - E.P. apparently used $1.585 as unit cost. - [illegible]

THE EAGLE-PICHER COMPANY
MINING AND SMELTING DIVISION
GEOLOGICAL DEPARTMENT
CARDIN, OKLAHOMA

March 5th., 1953

United States Department of the Interior
Defense Minerals Exploration Administration
Minneapolis, Minnesota.

ATT: MR. A. B. NEEDHAM.

Gentlemen:

The following is our summary of the respective drill holes that were drilled for the Eagle-Picher Company in LaFayette County, Wisconsin, during the month of February, 1953, under Defense Minerals Exploration Contract, Number Ldm- E339:

LEASE	DRILL HOLE NO.	REMARKS
Henry C. Gray,	21	This drill hole is on the trend of mineralization & cut good marcasite & calcite mineralization in the Oil Rock and Glass Rock horizons. No blende mineralization was noted.
Henry C. Gray,	22	This drill hole cut good marcasite mineralization with some calcite. The drilling on the Henry C. Gray lease indicates that the mineralized area is too low grade in blende to be mined profitably. The lease has been abandoned.
Francis M. Calvert,	11	Fair marcasite mineralization in lower part of Drab horizon from 200 to 215 feet depth. Hole loose & ravelled badly from 215 feet to 238 feet depth.
Francis M. Calvert,	12	Spotty marcasite mineralization from top of Drab horizon to top of McGregor horizon. Traces of blende in upper part of Drab horizon from 58 feet to 95 feet depth.

LEASE	DRILL HOLE NO.	REMARKS
Francis M. Calvert,	13	Very loose hole- ravelled badly. Spotty marcasite mineralization from 150 feet to 197.5 feet depth.
Fred W. Wilkinson,	5	Low grade marcasite mineralization in Blue horizon. Traces of blende in Oil Rock horizon.
Fred W. Wilkinson,	6	Hole loose & ravelled considerably. Gray horizon partly oxidized and contains low grade blende & much limonite.
Fred W. Wilkinson,	7	Rich marcasite mineralization from 65 feet to 90 feet. Hole oxidized to top of Gray horizon & contains much limonite. Drill holes 7 & 4 indicate mineralized trend too low grade in blende in immediate area.
Fred W. Wilkinson, & J.Frank Wilkinson,	2	Oxidized to 30 feet depth. Low grade blende mineralization from 65 feet to 105 feet depth. Good Zn CO_3 mineralization from 55 to 75 feet depth.
Fred Heim,	8	Good marcasite and calcite mineralization from top of Blue horizon at 67 feet to bottom of hole at 100 feet. Thick Oil Rock horizon.
Fred Heim,	9	Hole loose & ravelled considerably. Oxidized to 75 feet. Some calcite with marcasite & limonite from 45 feet to 75 feet depth. Drill holes 7, 8 & 9 have prospected mineralized trend & indicate weak trend of mineralization. This lease has been abandoned.

Very truly yours,

THE EAGLE-PICHER COMPANY.

By. J. P. Lyden

J. P. Lyden,
Chief Geologist
Mining & Smelting Div.

JPL/tp.

WORK PROGRESS REPORT

Docket 2399

Month February 1953

Contract Idm-E339

Company Eagle-Picher Company

Property East of Cuba City

DRILLING - The following holes were completed this period:

Lease	Hole	Date started	Date completed	Depth
H.C. Gray	21	1/30/53	2/ 4/53	279½
" " "	22	2/10/53	2/14/53	279½
F.M. Calvert	11	2/ 3/53	2/10/53	238
" " "	12	2/10/53	2/14/53	190½
" " "	13	2/16/53	2/25/53	196½
F.W. Wilkinson	5	2/ 5/53	2/ 6/53	80
" " "	6	2/ 7/53	2/10/53	115
" " "	7	2/18/53	2/19/53	90½
F.W. & J.F. Wilkinson	2	2/12/53	2/14/53	111
F. Heim	8	2/23/53	2/24/53	100½
" "	9	2/26/53	2/27/53	108½

The following holes were in progress this period, but not completed:

Lease	Hole	Date started	Footage reported	Remarks
F.M. Calvert	14	2/26/53	130	

TOTAL (completed) ~~(accrued)~~ footage this period 1789½ To date 20,146½

scratch one

DRIFTING AND CROSSCUTTING - Headings were advanced as follows:

Name and location	Average cross-section	Advance From-	Advance To-	Advance for period	Total advance to date	Remarks

TRENCHING AND TEST PITTING - The following excavations were in progress this period:

Name and location	Cubic yards this period	Cubic yards to date	Linear feet this period	Linear feet to date	Remarks

OTHER MAJOR WORK -

All work was performed in a satisfactory manner and the attached Form MF-104, Monthly Report, constituting certified invoice, rendered by the contractor under date of March 20, 19 53, totalling $ 3677.56, has been carefully checked and approved by me.

APPROVED BY:

H. J. Schroeder
Mining Engineer ~~or Geologist~~

W. A. Bramlette
~~Mining Engineer or~~ Geologist

Form M-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 1 1953

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

30

Month of January 1953 Docket No. DMEA 2399 Contract No. Idm B 339
Operator's Name The Eagle-Picher Co. Minerals Lead-Zinc
Address Galena, Illinois
Contract Amount, $ 191,250.78 Government Participation: 50 % Amount, $ 95,615.39

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) [redacted] Short Form } Contracts:	4544.34		29253.72			
Drilling	$4547.46	$24709.38	$29256.84	$4,544.34	24,709.38	29,253.72
Bulldozing						
Crosscutting				*See Attached Expense Sheet		
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	822.00	5480.00	6302.00	822.00	5,480.00	6,302.00
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
	5366.34		35555.97			
TOTALS	$5369.46	$30189.38	$35,558.84	$5366.34	30,189.38	35,555.72

I certify that the above bill is correct and just and that payment therefor has not been received.
Date Mar 5, 1953 *Payee The Eagle-Picher Co.

Per A. C. Tompkins Title Plant Accountant
A. C. Tompkins

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 2683.17 AG

Signature L. A. Hill
(Authorized Certifying Officer)

Date MAR 19 1953 Vou. No. 30
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. DMEE 339 in accordance with the terms of the contract.

Signature W. J. Schroeder Title Mining Engineer Date 3/10/53

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature C. B. Needham Title Ex Off Date 3/19/53

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MR-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 1 1953

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of January 1953 Docket No. DMEA 2399 Contract No. Idm-B-339
Operator's Name The Eagle-Picher Co. Minerals Lead Zinc
Address Galena, Illinois

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core		* 5366.34	2859	35 555.72	18357			
Churn								
Auger	foot	$5369.46	2861	$35,558.84	18359	1.937		
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		$5369.46		$35,558.84				$191,230.78

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

REMARKS:

Date March 5, 1953 Operator The Eagle-Picher Co.
Per A. C. Tompkins Title Plant Accountant
A. C. Tompkins

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

* See Attached Expense Sheet

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

U. S. GOVERNMENT PRINTING OFFICE 205676

THE EAGLE-PICHER COMPANY GALENA, ILLINOIS

DRILLING UNDER DMRA CONTRACT - JANUARY, 1953

	Hole No.	Footage drilled	
Project #1			
Henry C. Grey	15	282 280	
"	16	274.5	
"	17	275.5	
"	18	262.5	
"	19	237.5	
"	20	240.0	~~1572~~
Total project #1			1572 1570
Project# 2			
Calvert Estate (Tract #1)	39	208	
"	40	271.5	
~~Tmxxpxxjxxx~~ #2			
Francis M. Calvert	9	abandoned	
"	10	237.5	
Total Project #2			717
Project #3			
Calvert Estate (Tract #3)	21	138	
Clarence J. Busch	9	206.5	
"	10	95	
"	11	132.5	
Total Project #3			572
Total Footage Drilled January			2861 2859

Drilling Cost 2861 feet @ $1.565 (2859)	$4477.46	4474.34
Plugging 14 holes @ $5.00	70.00	
Chief Geologist one month	425.00	
Field " " "	397.00	
Total Cost month of January	$5369.46	5366.34

* Inked changes made to agree with drill log information

THE EAGLE-PICHER COMPANY
MINING AND SMELTING DIVISION
GEOLOGICAL DEPARTMENT
CARDIN, OKLAHOMA

February 9, 1953.

United States Department of the Interior,
Defense Minerals Exploration Administration
Minneapolis, Minnesota.

ATT: MR. A. B. NEEDHAM.

Gentlemen:

The following is a summary of the respective drill holes that were drilled for The Eagle-Picher Company in Lafayette County, Wisconsin, during the month of January, 1953, under Defense Minerals Exploration Contract, Number Idm-E 339:

LEASE	DRILL HOLE NO.	REMARKS
Calvert Estate, (Tract #1)	39	Marcasite mineralization in Blue & Oil Rock horizons. Much loose ground below 165 feet depth. This area which includes Drill holes 29 to 39 has been abandoned because the blende mineralization is too low grade and the drilling indicates loose caving ground that would make high cost mining.
Calvert Estate, (Tract #1)	40	Oil and Glass Rock beds thick & limy. This completes the drilling on Calvert Tr. # 1. Mineralized areas too small and low grade to make orebodies.
Calvert Estate, (Tract # 3)	21	This was a loose cavey hole that contained low grade marcasite mineralization in the Gray, Blue & Oil Rock horizons. This completes the drilling on Calvert-Tract #3. Mineralized areas too small and low grade & drilling indicates loose caving ground that would make high cost mining.
Francis M. Calvert,	9	Hole abandoned by driller at 145 feet because broken bit could not be fished out.

LEASE	DRILL HOLE NO.	REMARKS
Francis M. Calvert,	10	This hole is 6' from #9- good marcasite mineralization from 185 feet to 227½ feet depth. Hole extremely loose and caving to top of Oil Rock horizon which is unfavorable from a mining standpoint.
Clarence J. Busch,	9	Loose boulders from surface to 40 feet depth. Good marcasite mineralization 135-140 and 200-202½ feet depth.
Clarence J. Busch,	10	Hole was extremely loose and caved badly. This type of ground could not be mined profitably. When driller could not advance below 95 feet depth he was given permission to stop hole and move off the location.
Clarence J. Busch,	11	Loose hole with thin Oil & Glass Rock horizons. Only traces of marcasite mineralization.
Henry C. Gray,	15	Oil & Glass Rock horizons thick & limy. Only traces of marcasite.
Henry C. Gray,	16	Oil & Glass Rock horizons thick & limy. Only traces of marcasite mineralization.
Henry C. Gray,	17	Oil & Glass Rock horizons thick & limy. Only traces of marcasite mineralization. Openings at 190 to 195 and 230 to 232½ feet depth and strong flow of water indicated edge of zone where Oil Rock & Glass Rock horizons are thinned.
Henry C. Gray,	18	Good marcasite mineralization in Blue horizon. Hole loose and open from 190 to 247½ feet depth. Unfavorable from mining standpoint. Trend of mineralization easterly
Henry C. Gray,	19	Good marcasite mineralization from 160 to 227½ feet depth. Low grade blende mineralization from 220 to 230 feet depth. In same low grade trend of mineralization as drill holes 11 & 13.
Henry C. Gray,	20	Fair marcasite mineralization in Gray & Blue horizons. Low grade blende mineralization in Oil Rock horizon.

Very truly yours,

THE EAGLE-PICHER COMPANY.

By. J. P. Lyden

J.P.Lyden, Chief Geologist.

JPL/tp.

WORK PROGRESS REPORT

Docket 2399

Month January 1953

Contract Idm - E339

Company Eagle-Picher Co.

Property East of Cuba City

DRILLING - The following holes were completed this period:

Lease	Hole	Date started	Date completed	Depth
H.C. Gray	15	1/ 3/53	1/ 8/53	280
" " "	16	1/ 8/53	1/13/53	274½
" " "	17	1/13/53	1/17/53	275½
" " "	18	1/17/53	1/22/53	262½
" " "	19	1/23/53	1/27/53	237½
" " "	20	1/27/53	1/30/53	240
Calvert Estate	39	12/29/52	1/14/53	208
" "	40	1/16/53	1/23/53	271½
F.M. Calvert	9	1/19/53	- - - - - abandoned - - - - - - - -	
" " "	10	1/27/53	1/31/53	237½
Calvert Estate	21	1/24/53	1/30/53	138
C.J. Busch	9	12/31/52	1/10/53	206½
" " "	10	1/10/53	1/13/53	95
" " "	11	1/14/53	1/16/53	132½

The following holes were in progress this period, but not completed:

Lease	Hole	Date started	Footage reported	Remarks
H.C. Gray	21	1/30/53	110	

TOTAL (completed) ~~(accrued)~~ footage this period 2859 To date 18,357
scratch one

DRIFTING AND CROSSCUTTING - Headings were advanced as follows:

Name and location	Average cross-section	Advance From-	Advance To-	Advance for period	Total advance to date	Remarks

TRENCHING AND TEST PITTING - The following excavations were in progress this period:

Name and location	Cubic yards this period	Cubic yards to date	Linear feet this period	Linear feet to date	Remarks

OTHER MAJOR WORK -

All work was performed in a satisfactory manner and the attached Form MF-104, Monthly Report, constituting certified invoice, rendered by the contractor under date of March 5, 19 53, totalling $ 5366.34, has been carefully checked and approved by me.

APPROVED BY:

W. J. Schneider
Mining Engineer ~~or Geologist~~

W. A. Broughton
~~Mining Engineer or~~ Geologist

Form MF-104 (Rev.)
(April 1952)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 9 1953

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of [illegible], 195[illegible] Docket No. DMEA [illegible] Contract No. [illegible]
Operator's Name The Eagle-Picher Company Minerals [illegible]
Address Galena, Illinois
Contract Amount, $[illegible] Government Participation: [illegible] % Amount, $[illegible]

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	[illegible]	[illegible]	[illegible]	2888.61	21,820.77	24,709.38
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	[illegible]	[illegible]	[illegible]	822.00	4,658.00	5,480.00
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	[illegible]	[illegible]	[illegible]	3710.61	26,478.77	30,189.38

I certify that the above bill is correct and just and that payment therefor has not been received.

Date [illegible] *Payee [illegible]

Per [illegible] Title [illegible]

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 1855.30

Signature L. A. Hill
(Authorized Certifying Officer)

Date FEB - 2 1953 Vou. No. 95
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm E339 in accordance with the terms of the contract.

Signature W. J. Schroeder Title Mining Engineer Date 1-28-53

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature O. B. Weaver Title Ex Off Date FEB 2 1953

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
[illegible] 1953

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of [illegible] 195[illegible] Docket No. DMEA [illegible] Contract No. [illegible]
Operator's Name [illegible] Minerals [illegible]
Address [illegible]

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn	Foot	3710.61	1.17	301[illegible]	19[illegible]	1.[illegible]		
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Total Distributed Costs								Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		3710.61		301[illegible]				191,[illegible]

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date Jan [illegible], 1953 Operator [illegible]

Per A G Dompkins Title [illegible]

→ **NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.**

Remarks:

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

U. S. GOVERNMENT PRINTING OFFICE 205676

THE EAGLE-PICHER COMPANY GALENA, ILLINOIS

DRILLING UNDER ERLA CONTRACT - DECEMBER, 1952

	Hole No.	Footage drilled	
Project #1			
John Oliver Gray	2	283	
Total Project #1			283
Project #2			
Calvert Estate Tract #1	36	221	
	37	230	
	38	211	
Total Project #2			662
Project #3			
William F. Snyder	5	130	
Clarence J. Busch	6	193	
" "	7	218	
" "	8	206	
Total Project #3			747
Project #4			
Fred Helm	3	125	
Total Project #4			125
Total Footage drilled - December			1817

Drilling Cost 1817 feet 1.565	$2843.61
Plugging 9 holes $5.00 each	45.00
Chief Geologist 1 month	425.00
Field Geologist 1 month	397.00
Total cost month of December, 1952	$ 3710.61

THE EAGLE-PICHER COMPANY
MINING AND SMELTING DIVISION
GEOLOGICAL DEPARTMENT
CARDIN, OKLAHOMA

January 8, 1953.

United States Department of the Interior
Defense Minerals Exploration Administration,
Minneapolis, Minnesota.

ATT: MR.A. B. NEEDHAM.

Gentlemen:

In our summary report on the respective drill holes that the Eagle-Picher Company finished drilling during the month of November, 1952, in Lafayette County, Wisconsin, under the Defense Minerals Exploration Contract, number Idm-E 339, drill hole number 3 on the Fred Heim lease was overlooked.

The following is a summary for this drill hole:-

LEASE	DRILL HOLE NO.	REMARKS.
Fred Heim,	3	High calcite in bottom of Drab and in Gray horizons. Beds higher structurally than in drill holes to northeast. Some more drilling will be necessary between drill holes number 3 and 7.

Yours very truly,

THE EAGLE-PICHER COMPANY.

By. J. P. Lyden

J. P. Lyden,
Chief Geologist
Mining & Smelting Div.

JPL/tp.

THE EAGLE-PICHER COMPANY
MINING AND SMELTING DIVISION
GEOLOGICAL DEPARTMENT
CARDIN, OKLAHOMA

January 6, 1953.

United States Department of the Interior,
Defense Minerals Exploration Administration
Minneapolis, Minnesota.

ATT: MR. A. B. NEEDHAM.

Gentlemen:

The following summary gives the details on the respective drill holes that were drilled for The Eagle-Picher Company in Lafayette County, Wisconsin, during the month of December, 1952, under the Defense Minerals Exploration Contract, Number Idm-E339:

LEASE	DRILL HOLE NO.	REMARKS.
Calvert Estate, (Tract # 1)	36	Good marcasite mineralization from 155 to 207½ feet depth. Low grade blende mineralization in Oil Rock horizon.
Calvert Estate, (Tract # 1)	37	Low grade blende mineralization with fair marcasite in Blue and Oil Rock horizons.
Calvert Estate, (Tract # 1)	38	Extremely loose formations throughout hole. Low grade galena mineralization 85 to 95 feet depth. Fair marcasite mineralization 165 to 211 feet depth.
William F. Snyder,	5	Loose barren hole oxidized to 105 feet. Unfavorable area.
Clarence J.Busch,	6	Low grade marcasite mineralization 115 to 170 feet depth. Little blende mineralization 115 to 120 feet depth. Oil and Glass Rock horizons thin.
Clarence J.Busch,	7	Fair marcasite mineralization from top of Drab horizon to top of Oil Rock horizon. Area to east favorable structure.

LEASE	DRILL HOLE NO.	REMARKS.
Clarence J.Busch,	8	Scattered marcasite mineralization from 125 to 206 feet. Oil Rock horizon thick. Favorable area to north.
John Oliver Gray,	2	No mineralization. Oil Rock and Glass Rock thick and limy. Unfavorable area.

Very truly yours,

THE EAGLE-PICHER COMPANY.

By. J. P. Lyden
J. P. Lyden,
Chief Geologist
Mining & Smelting Div.

JPL/tp.

WORK PROGRESS REPORT

Docket 2399

Month December 1952

Contract Idm-E 339

Company Eagle-Picher Co.

Property East of Cuba City

DRILLING - The following holes were completed this period:

Lease	Hole	Date started	Date completed	Depth
J. O. Gray	2	12/15/52	12/19/52	283
Calvert Estate	36	11/22/52	12/ 3/52	221
" "	37	12/ 6/52	12/12/52	230
" "	38	12/15/52	12/27/52	211
W. F. Snyder	5	12/ 1/52	12/ 3/52	130
C. J. Busch	6	12/ 4/52	12/10/52	193
" " "	7	12/11/52	12/18/52	218
" " "	8	12/19/52	12/30/52	206
F. Heim	* 3	10/30/52	11/ 1/52	125

* Drilled in November

The following holes were in progress this period, but not completed:

Lease	Hole	Date started	Footage reported	Remarks
Calvert Estate	39	12/29/52	130	
C. J. Busch	9	12/31/52	20	

TOTAL (completed)(~~xxxxxxx~~) footage this period 1817 To date 15,498
scratch one

DRIFTING AND CROSSCUTTING - Headings were advanced as follows:

Name and location	Average cross-section	Advance From-	Advance To-	Advance for period	Total advance to date	Remarks

TRENCHING AND TEST PITTING - The following excavations were in progress this period:

Name and location	Cubic yards this period	Cubic yards to date	Linear feet this period	Linear feet to date	Remarks

OTHER MAJOR WORK -

All work was performed in a satisfactory manner and the attached Form MF-104, Monthly Report, constituting certified invoice, rendered by the contractor under date of January 23, 19 53, totalling $ 3710.61, has been carefully checked and approved by me.

APPROVED BY:

H. J. Schroeder
Mining Engineer ~~xxxxGeologistxx~~

W. A. Bramlette
~~xxxxxxxxxxxxxxxx~~ Geologist

Form MF-104 (Rev.)
(April 1952)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R036.3.
Approval expires 6-30-53.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 9 1953

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of [illegible], 195[illegible] Docket No. DMEA [illegible] Contract No. [illegible]
Operator's Name [illegible] Minerals [illegible]
Address [illegible]
Contract Amount, $[illegible] Government Participation: [illegible] % Amount, $[illegible]

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	[illegible]	[illegible]	[illegible]	2258.22	19,562.55	21,820.77
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	[illegible]	[illegible]	[illegible]	822.00	3,836.00	4,658.00
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	[illegible]	[illegible]	[illegible]	3080.22	23,398.55	26,478.77

I certify that the above bill is correct and just and that payment therefor has not been received.

Date [illegible] *Payee [illegible]

Per A. C. Tompkins Title [illegible]

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 1540.11 #6

Signature L. A. Shee
(Authorized Certifying Officer)

Date FEB - 2 1953 Vou. No. 25
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm E339 in accordance with the terms of the contract.

Signature [illegible] Title Mining Engineer Date 1-28-53

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature [illegible] Title Ex Off Date FEB 2 [illegible]

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

Budget Bureau No: 42-R1151
Approval expires 6-30-53.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 1953

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of [illegible] 1952 Docket No. DMEA [illegible] Contract No. [illegible]
Operator's Name [illegible] Minerals [illegible]
Address [illegible]

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn	FOOT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		[illegible]		[illegible]				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								[illegible]

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date [illegible] Operator [illegible]
Per A G Dompelhiers Title [illegible]

REMARKS:

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

U. S. GOVERNMENT PRINTING OFFICE 205676

THE EAGLE-PICHER COMPANY GALENA, ILLINOIS

DRILLING ON DSSA CONTRACT - NOVEMBER, 1952

	Hole No.	Footage drilled	
Project #2			
Calvert Estate Tract #1	33	203	
"	34	220	
"	35	215	638x
Total Footage Project #2			638
Project #3			
William F. Snyder	2	133	
" "	3	105	
" "	4	135	
Total Footage Project #3			373
Project #4			
Fred Naim	4	100	
	5	97.5	
	6	110	
	7	92.5	
Total Footage Project #4			400
Total Footage Drilled November			1411

Drilling Cost 1411 feet @ 1.565	$2208.22
Plugging 10 holes @ $5.00 each	50.00
Chief Geologist one month	425.00
Field Geologist one month	397.00
Total cost month of November, 1952	$3080.22

EAGLE-PICHER

THE EAGLE-PICHER COMPANY

ZINC AND ZINC PRODUCTS · LEAD AND LEAD PRODUCTS · HOME AND INDUSTRIAL INSULATIONS

MINING & SMELTING DIVISION
TRI-STATE MINES
CARDIN, OKLAHOMA

December 4, 1952.

United States Department of the Interior
Defense Minerals Exploration Administration,
Minneapolis, Minnesota.

ATT: MR. A. B. NEEDHAM.

Gentlemen:

The following is a summary giving the details on the respective drill holes that were drilled during the month of November, 1952, for the Assistance Contract DMEA- Eagle-Picher Company drilling in Lafayette County, Wisconsin:-

Lease	Drill hole Number	Remarks.
Calvert Estate (Tract # 1)	33	Extremely loose hole, soft formation to Oil Rock horizon. Few traces of marcasite & galena in lower horizons.
" "	34	Much marcasite in lower horizons- Blue to McGregor. Loose hole with soft formations. Hole on outer edge of area of mineralization.
" "	35	Low grade marcasite mineralization in Blue, Oil, and Glass Rock horizons. Loose hole with soft horizons to Oil Rock horizon. Hole on outer edge of area of mineralization.
Fred Heim,	4	Some calcite mineralization from 30 to 57½ feet depth in bottom of Drab and in Gray horizons. Few specks of galena in Oil Rock horizon. Hole in area where Oil Rock and Glass Rock horizons are thick and limy, and under these conditions are not generally favorable for commercial mineralization.

Lease.	Drill hole Number	Remarks.
Fred Heim,	5	Oil & Glass Rock horizons thick & limy. Few traces & specks of marcasite throughout hole. Few specks of blende in Glass Rock horizon. Unfavorable area for commercial mineralization in lower horizons- Gray to Glass Rock.
Fred Heim,	6	Traces and specks of marcasite throughout hole. Little calcite mineralization in lower horizons. Thick Oil Rock & Glass Rock horizons indicates area unfavorable to commercial mineralization in these horizons.
Fred Heim,	7	Marcasite & calcite mineralization from 35 to 85 feet depth- from bottom part of Drab horizon to top of Glass Rock horizons. Marcasite partly oxidized to limonite in Gray, Blue & Oil Rock horizons which indicates that if there is an orebody in the immediate area it may be partly or largely oxidized.
William F. Snyder,	2	Very loose hole, soft formations. Oxidized to top of Oil Rock horizon. Unfavorable area because of deep oxidation and soft ground.
William F. Snyder,	3	Extremely soft to top of McGregor. Traces of quartz & marcasite. Unfavorable area for mining because of soft ground.
William F. Snyder,	4	Traces of marcasite in Blue & Oil Rock horizons. No zinc mineralization.

Yours very truly,

THE EAGLE-PICHER COMPANY.

By. J. P. Lyden

J. P. Lyden,
Chief Geologist,
Mining & Smelting Div.

JPL/tp.

WORK PROGRESS REPORT

Docket 2399

Month November 1952

Contract Idm-E339

Company Eagle-Picher Co.

Property East of Cuba City

DRILLING - The following holes were completed this period:

Lease	Hole	Date started	Date completed	Depth
Calvert Estate	33	10/17/52	11/1/52	203
" "	34	11/ 3/52	11/11/52	220
" "	35	11/12/52	11/21/52	215
W. F. Snyder	2	11/14/52	11/18/52	133
" " "	3	11/19/52	11/21/52	105
" " "	4	11/21/52/	11/24/52	135
F. Heim	4	11/ 1/52	11/ 4/52	100
" "	5	11/ 4/52	11/ 7/52	97½
" "	6	11/ 7/52	11/11/52	110
" "	7	11/11/52	11/13/52	92½

The following holes were in progress this period, but not completed:

Lease	Hole	Date started	Footage reported	Remarks
Calvert Estate	36	11/22/52	150	

TOTAL (completed) ~~(accrued)~~ footage this period 1,411 To date 13,681
scratch one

DRIFTING AND CROSSCUTTING - Headings were advanced as follows:

Name and location	Average cross-section	Advance From-	Advance To-	Advance for period	Total advance to date	Remarks

TRENCHING AND TEST PITTING - The following excavations were in progress this period:

Name and location	Cubic yards this period	Cubic yards to date	Linear feet this period	Linear feet to date	Remarks

OTHER MAJOR WORK -

All work was performed in a satisfactory manner and the attached Form MF-104, Monthly Report, constituting certified invoice, rendered by the contractor under date of January 23, 19 53, totalling $ 3,080.22, has been carefully checked and approved by me.

APPROVED BY:

W. J. Schroeder

Mining Engineer ~~or Geologist~~

W. A. Broughton

~~Mining Engineer or~~ Geologist

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
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UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of October 1952 Docket No. DMEA 2399 Contract No. Idm [illegible] 339
Operator's Name The Eagle-Picher Co. Minerals Lead-Zinc
Address Galena, Illinois
Contract Amount, $ 191,230.78 Government Participation: 50 % Amount, $ 95,615.39

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:					adjusted total	
Drilling	4569.05	14993.50	19562.55	4,569.05	14,993.50	19,562.55
Bulldozing		See attached schedule				
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	822.00	3014.00	3836.00	822.00	3,014.00	3,836.00
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	5391.05	18007.50	23398.55	5,391.05	18,007.50	23,398.55

I certify that the above bill is correct and just and that payment therefor has not been received.
Date Jan. 23,53 *Payee The Eagle-Picher Co.
Per A. C. Tompkins Title Plant Accountant
A. C. Tompkins

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:
$ 2695.52 AH
Signature L. A. Hill
(Authorized Certifying Officer)
Date FEB - 2 1953 Vou. No. 25
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm-E339 in accordance with the terms of the contract.

Signature H. J. Schroeder Title Mining Engineer Date 1-28-53

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature [illegible] Title [illegible] Date FEB 2 1953

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
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FEB 9 1953

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of October 1952 Docket No. DMEA 2399 Contract No. Idm B339
Operator's Name The Eagle-Picher Co. Minerals Lead-Zinc
Address Joplin, Illinois

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn	foot	5391.05	2401	23398.55	12270	1.907		
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		5391.05		23398.55				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								$191,230.78

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date Jan. 24, 1953 Operator The Eagle-Picher Co.

Per A. C. Tompkins Title Plant Accountant
A. C. Tompkins

REMARKS: see supporting schedule for adjustment of costs to date

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

U. S. GOVERNMENT PRINTING OFFICE 205676

Supporting Schedule of Operator's Unit Cost and Progress Report
October, 1952
THE EAGLE-PICHER COMPANY GALENA, ILLINOIS

* Note

ADJUSTMENT OF COSTS TO SEPTEMBER 30, 1952
per A. B. Needham letter 1/15/53 to A. C. Tompkins
Galena, Illinois

Costs to September 30, 1952		$18,763.06
Less amount deleted by you on September statement- 2915.5 Ft @ 23¢	$670.56	
Plugging holes September 17 holes @ $5.00 ea.	85.00	755.56
		$18,007.50

DRILLING ON DMSA CONTRACT - OCTOBER, 1952

	Hole No.	Footage drilled	
Project #2			
Calvert Estate Tract #1	31	218	
"	32	218	~~436~~
Total Footage Project #2			436
Project #3			
Calvert Estate Tract #3	20	160	
Verna B. Cole #2	14	128	
" "	15	133	
Henry V. Hingerman	4	148	
" "	5	142	
Vincent Finch	3	73	
" "	4	105	
" "	5	156	
Arnold J. Splinter	2	148	
" "	3	144	
" "	4	134	
Bessie Siseman	1	107	
"	2	138	
Total Footage Project #3			1716
Project #4			
Fred Heim	1	103	
"	2	146	
Total Footage Project #4			249
Total Footage Drilled October			2401

Drilling Cost- 2401 feet @ ~~$2.56~~ 1.565	$3,757.56
Plugging 17 holes @ $5.00 each	85.00
Chief Geologist salary 1 month	425.00
Field Geologist salary 1 month	397.00
	$4664.56
Plus adjusted footage cost to 9/30/52 9869 feet @ .065	641.49
Plus plugging 17 holes @ $5.00 September	85.00
	$5391.05

November 5, 1952.

United States Department of the Interior,
Defense Minerals Exploration Administration
Minneapolis, Minnesota.
ATT: MR. A. B. NEEDHAM.

Gentlemen:

The following summary covers the details on the drill holes for the Assistance Contract DMEA- Eagle-Picher Company drilling in Lafayette County, Wisconsin, during the month of October, 1952:

LEASE	DRILL HOLE NO.	REMARKS.
Bessie Wiseman,	1	Some marcasite mineralization in bottom 15 feet of Drab horizon. Trace of galena in Oil Rock horizon. Oxidized 15' to 40' & ravelling some.
" "	2	Little marcasite & few specks of blende & galena in lower beds, glass rock dolomitized.
Henry V. Hinderman,	4	Loose ground to 46 feet. Hole barren.
" "	5.	Loose caving ground & oxidized to bottom of hole. Impossible to pick contacts exactly.
Verna B. Cole,	14	Loose caving round from 13' to 40'. Only traces of marcasite. Glass Rock horizon thinned to 2.4 feet thick.
" "	15	Coarse cuttings indicating open ground from 35' to 132.5 feet. Only a few specks of marcasite mineralization.
Vincent Pinch,	3	Barren hole. Thick limy Oil Rock & Glass Rock horizons

LEASE	DRILL HOLE NO.	REMARKS.
Vincent Pinch,	4	Rich marcasite mineralization from 75' to 105'. Ore holes indicated on U.S.G.S. map 200 feet east of this location.
" "	5	Thick limy Oil Rock & Glass Rock horizons. Little marcasite mineralization in Gray and Glass Rock horizons.
Calvert Estate, Tract # 1,	31	Ore in Blue and Oil Rock horizons. Oil Rock very soft.
" " Tract # 1,	32	Ore in Blue and Oil Rock horizons. Rich marcasite mineralization from 170 to 207½ feet.
" " Tract # 3,	20	Loose ground. Caved badly.
Arnold J. Splinter,	2	Hole soft oxidized down to Clay bed. Caved & filled up 30 feet after drilling from 147½ - 150 feet.
" "	3	Hole loose and caved badly from 112½-140 feet. Oxidized to 130 feet.
" "	4	Thin Oil Rock & Glass Rock horizons. Hole barren.
Fred Heim,	1	Hard barren hole.
" "	2	Thick Oil Rock & Glass Rock horizon. Traces of marcasite throughout hole.

Yours very truly,

THE EAGLE-PICHER COMPANY.

BY. J. P. Lyden

J. P. Lyden,
Chief Geologist,
Mining & Smelting Div.

JPL/tp.

WORK PROGRESS REPORT

Docket 2399 Month October 1952

Contract Idm E-339 Company Eagle-Picher Company

Property East of Cuba City

DRILLING - The following holes were completed this period:

Lease	Hole	Date started	Date completed	Depth
Calvert Estate,(Tract 1)	31	10/ 2/52	10/ 7/52	218
" " " "	32	10/ 9/52	10/16/52	218
Calvert Estate,(Tract 3)	20	10/17/52	10/20/52	160
V. B. Cole	14	10/ 6/52	10/ 9/52	128
" " "	15	10/10/52	10/11/52	133
H. V. Hinderman	4	9/26/52	10/ 2/52	148
" " "	5	10/ 2/52	10/ 4/52	142
V. Pinch	3	10/ 7/52	10/ 9/52	73
" "	4	10/10/52	10/13/52	105
" "	5	10/13/52	10/17/52	156
A. J. Splinter	2	10/13/52	10/17/52	148
" " "	3	10/18/52	10/22/52	144
" " "	4	10/23/52	10/25/52	134
B. Wiseman	1	10/ 1/52	10/ 2/52	107
" "	2	10/ 3/52	10/ 6/52	138
F. Heim	1	10/22/52	10/24/52	103
" "	2	10/25/52	10/30/52	146

The following holes were in progress this period, but not completed:

Lease	Hole	Date started	Footage reported	Remarks
Calvert Estate	33	10/17/52	165	
F. Heim	3	10/30/52	110	

TOTAL (completed)(~~accrued~~) footage this period 2401 To date 12,270
scratch one

DRIFTING AND CROSSCUTTING - Headings were advanced as follows:

Name and location	Average cross-section	Advance From-	Advance To-	Advance for period	Total advance to date	Remarks

TRENCHING AND TEST PITTING - The following excavations were in progress this period:

Name and location	Cubic yards this period	Cubic yards to date	Linear feet this period	Linear feet to date	Remarks

OTHER MAJOR WORK -

All work was performed in a satisfactory manner and the attached Form MF-104, Monthly Report, constituting certified invoice, rendered by the contractor under date of January 23, 19 53, totalling $5391.05, has been carefully checked and approved by me.

APPROVED BY:

H. J. Schroeder
Mining Engineer[redacted]

W. A. Brumpton
[redacted] Geologist

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 22 1953

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of September 1952 Docket No. DMEA 23998 Contract No. Idm E 339
Operator's Name The Eagle-Picher Co. Minerals Lead&Zinc
Address Galena, Illinois
Contract Amount, $ 184,038.00 Government Participation: 50 % Amount, $ 92,019.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:				3994.50		
Drilling	4691.99	11,057.07	15,749.06	*4567.04	11,057.07	15,624.11
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	822.00	2,192.00	3,014.00	822.00	2,192.00	3,014.00
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives				susp a/c diff in rate		
Pipe						
Track				58.07 – Aug Voucher #12		
				572.54		
				630.61		
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	5513.99	13,249.07	18,763.06	5389.04	13,249.07	18,638.11
				630.61		
				4758.43		
						18,007.50

*In accordance to telephone conversation of 10/27/52 with Needham advising Amendment No. 1 will be revised to $1.715 per foot.

RECEIVED NOV 3 1952 BUREAU OF MINES REGION 4 MINING DIVISION

I certify that the above bill is correct and just and that payment therefor has not been received.

Date Oct. 16, 1952 *Payee The Eagle-Picher Co.

Per A. C. Tompkins Title Plant Accountant

A. C. Tompkins

*When a voucher is signed on behalf of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 2379.21

Signature L. A. Hill
(Authorized Certifying Officer)

Date DEC 23 1952 Vou. No. 21
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idn E339 in accordance with the terms of the contract.

Signature H. J. Schroeder Title Mining Engr. Date 10/31/52

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature C. B. Meadham Title Ex. Off. Date NOV 3 1952

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 22 1953

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of September 195 2 Docket No. DMEA 2399 Contract No. Idm E 339
Operator's Name
Minerals Lead-Zinc
Address

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: ~~Core~~		*5389.04		18,638.11		1.889		
Churn	Foot	5513.99	2663	18,763.06	9869	1.901		
~~Auger~~								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		5513.99		18,763.06				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								$184,038.00

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date Oct. 16, 1952 Operator THE EAGLE-PICHER CO.

Per /S/ A. C. Tompkins Title Plant Accountant
A. C. Tompkins

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

REMARKS:

(Instructions on reverse)

(For Government use only)

*As Approved.

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

U. S. GOVERNMENT PRINTING OFFICE 205676

WORK PROGRESS REPORT

Docket 2399 Month September 1952

Contract Idm B-339 Company Eagle-Picher Co.

Property East of Cuba City

DRILLING - The following holes were completed this period:

Lease	Hole	Date started	Date completed	Depth
R.F. Houtakker	2	9/4/52	9/9/52	241½
	4	9/15/52	9/18/52	243
Calvert Estate	28	8/27/52	9/ 2/52	215
	29	9/ 3/52	9/13/52	214
	30	9/17/52	9/22/52	197½
F.W. Wilkinson	1	9/ 1/52	9/ 4/52	135
	2	9/12/52	9/15/52	112½
	3	9/15/52	9/18/52	142½
	4	9/19/52	9/19/52	82½
Delmar Heim	1	9/ 4/52	9/ 6/52	136
	2	9/ 8/52	9/ 9/52	137½
	3	9/10/52	9/12/52	122½
H.V. Hinderman	1	6/26/52	6/28/52	135½
" " "	3	9/20/52	9/25/52	147
F.W.&J.F. Wilkinson	1	9/22/52	9/23/52	115
V. Pinch	1	9/24/52	9/26/52	146
" "	2	9/26/52	9/30/52	140

The following holes were in progress this period, but not completed:

Lease	Hole	Date started	Footage reported	Remarks
H.V. Hinderman	4	9/26/52	105	

TOTAL (completed)(~~xxxxxxx~~) footage this period 2663 To date 9869
scratch one

DRIFTING AND CROSSCUTTING - Headings were advanced as follows:

Name and location	Average cross-section	Advance From-	Advance To-	Advance for period	Total advance to date	Remarks

TRENCHING AND TEST PITTING - The following excavations were in progress this period:

Name and location	Cubic yards this period	Cubic yards to date	Linear feet this period	Linear feet to date	Remarks

OTHER MAJOR WORK -

All work was performed in a satisfactory manner and the attached Form MF-104, Monthly Report, constituting certified invoice, rendered by the contractor under date of October 16, 19 52, totalling $ 5389.04, has been carefully checked and approved by me.

APPROVED BY:

H. J. Schroeder
Mining Engineer ~~Geologist~~

W. A. Broughton
~~Mining Engineer or~~ Geologist

Form MF-104 (Rev.)
(April 1952)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.3.

DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration
RECEIVED
OCT 6 1952

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of August, 1952 Docket No. DMEA 2399 Contract No. Idm E 339
Operator's Name THE EAGLE-PICHER CO. Minerals Lead - Zinc
Address GALENA, ILLINOIS
Contract Amount, $ 184,038.00 Government Participation: 50% Amount, $ 92,019.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	3868.32	7188.75	11057.07	3868.32	7188.75	11057.07
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	822.00	1370.00	2192.00	822.00	1370.00	2192.00
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	4690.32	8558.75	13249.07	4690.32	8558.75	13249.07

I certify that the above bill is correct and just and that payment therefor has not been received.

Date Sept. 16, 1952 *Payee The Eagle-Picher Co.

Per A C Dompkins Title Plant Accountant

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 2345.16 JAG

Signature L. A. Hill
(Authorized Certifying Officer)

Date OCT - 2 1952 Vou. No. 12
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm B-339 in accordance with the terms of the contract.

Signature W. J. Schrader Title Mining Engineer Date 9/25/52

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature G B Weldhein Title [illegible] Date 10/2/52

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-[illegible] A[illegible]
(April 1[illegible])

Budget Bureau No. 42-R1151
Approval expires 8-30-53

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 6 1952

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of August 1952 Docket No. DMEA 2399 Contract No. Idm E 339
Operator's Name THE EAGLE-PICHER CO. Minerals Lead - Zinc
Address GALENA, ILLINOIS

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn	FT.	4690.32	2493.5	13249.07	7206	1.839		
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		4690.32		13249.07				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		4690.32		13249.07				184038.00

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date Sept. 16, 1952 Operator The Eagle-Picher Co.

Per A C Tompkins Title Plant Accountant

REMARKS: Costs authorized by contract are $1.50 per foot of drilling to Aug. 27, then by amendment $1.73 per foot, plus $5.00 per hole for plugging and chief geologist and field geologist salaries totalling $822.00 per month

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period:

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

U. S. GOVERNMENT PRINTING OFFICE 205676

THE EAGLE-PICHER COMPANY
GALENA, ILLINOIS

Drilling on DMEA Contract for month of August, 1952

	HoleNo.	Footage Drilled 8/1 to 8/26	Footage Drilled 8/27 to 8/31
Project No. 1			
Raymond F. Houtakker	1	275	
Totalfeet		275	
Project No. 2			
Calvert Estate	26	202.5	
"	27	184	30
Clarence P. Ralph	1	162.5	
"	2	167.5	
"	3	183.5	
"	4	220	
Francis M. Calvert	7	156	
"	8	80	95
Total feet		1356	125
Project No. 3			
Calvert Estate	16	148.5	
"	17	175	
"	18	131.5	
"	19	155	
Verna B. Cole	13		127.5
Total feet		610	127.5

Total footage drilled to Aug. 27, 1952	2241 ft.
" " " 8/27 to 8/31	252.5 ft.
Grand total	2493.5 ft.

Drilling Cost	2241 ft. @ 1.50 per foot	$3361.50
	252.5 @ 1.73 per foot	436.82
Plugging Holes	14 holes @ $5.00 per hole	70.00
	Total drilling cost	$3868.32
Chief Geologist	1 month @ $425.00	425.00
Field Geologist	1 month @ $397.00	397.00
	Total Technical Cost	$ 822.00
	GRAND TOTAL COST for period	$4690.32

September 9,1952

United States Department of the Interior
Defense Minerals Exploration Administration,
Minneapolis, Minnesota.
ATT: MR. A. B. NEEDHAM.

Gentlemen:

The following summaries cover the Assistance Contract DMEA- Eagle-Picher Company drilling for August, 1952, Lafayette County, Wisconsin:

LEASE	DRILL HOLE NO.	REMARKS.
Calvert Estate, Tract # 1,	26	Structure drilling. Hole near west edge of thinned Oil & Glass Rock horizons. Hole soft & caving from 155'- 191'.
" "	27	Structure drilling. Oxidized from 0' to 170'- Open & strong water 175-180' & 205-210'.
Calvert Estate- Tract # 3,	16	Thick Oil & Glass Rock horizons. No mineralization.
" "	17	All oxidized to 140'. Marcasite partly oxidized in Oil & Glass Rock horizons. Weak blende mineralization in Glass Rock & top of McGregor horizons.
" "	18	Hard. Thick Oil & Glass Rock horizons. No mineralization.
" "	19	Soft & oxidized to top of Oil Rock horizon.
Frances M. Calvert,	7	Thin Oil & Glass Rock horizons. Low grade marcasite mineralization in Drab horizon.
" "	8	Thick Oil & Glass Rock horizons. Low grade oxidized marcasite mineralization in Drab horizon.
Verna B.Cole- Tract # 1,	13	Thin Oil & Glass Rock horizons. No mineralization.

LEASE	DRILL HOLE NO.	REMARKS.
Raymond F. Houtaiker,	1	Thick Oil & Glass Rock horizons. No mineralization.
Clarence P. Ralph,	1	Low grade marcasite in Gray, Blue & Oil Rock horizons. Thin Oil & Glass Rock horizons.
" "	2	Thick Oil & Glass Rock horizons. Low grade marcasite oxidized in Drab & Gray horizons. No blende.
" "	3	Oil & Glass Rock horizons relatively thick. Traces of marcasite throughout hole. No Blende.
" "	4	Very thin Oil & Glass Rock horizons-loose ground 155-165'. Traces of marcasite throughout hole.

Very truly yours,

THE EAGLE-PICHER COMPANY.

By. J. P. Lyden
J. P. Lyden,
Chief Geologist,
Mining & Smelting Div.

JPL/tp.

WORK PROGRESS REPORT

Docket 2399 Month August 1952

Contract Idm B-339 Company Eagle-Picher Co.

Property East of Cuba City

DRILLING - The following holes were completed this period:

Lease	Hole	Date started	Date completed	Depth
R. F. Houtakker	1	7/28/52	8/ 4/52	275
Project No. 2:				
Calvert Estate	26	8/13/52	8/18/52	202½
" "	27	8/21/52	8/27/52	214
C. P. Ralph	1	8/ 5/52	8/ 7/52	162½
" "	2	8/ 8/52	8/12/52	167½
" "	3	8/13/52	8/18/52	153½
" "	4	8/18/52	8/23/52	220
F. M. Calvert	7	7/30/52	8/4 /52	156
" "	8	8/25/52	8/28/52	175
Project No. 3:				
Calvert Estate	16	7/29/52	8/ 1/52	148½
" "	17	8/ 2/52	8/ 6/52	175
" "	18	8/ 7/52	8/ 9/52	131½
" "	19	8/11/52	8/13/52	155
V. B. Cole	13	8/29/52	8/30/52	127½

The following holes were in progress this period, but not completed:

Lease	Hole	Date started	Footage reported	Remarks
Not reported				

TOTAL (~~completed~~)(~~assumed~~) footage this period 2,493½ To date 7,206
scratch one

All work was performed in a satisfactory manner and the attached Form MF -104, Monthly Report, constituting certified invoice, rendered by the contractor under date of September 16, 19 52, totalling $ 4,690.32, has been carefully checked and approved by me.

APPROVED BY:

H. J. Schroeder

H. J. Schroeder, Mining Engineer

W. A. Broughton

W. A. Broughton, Geologist

Form MF-104 (Rev.)
(April 1952)

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 6 1952

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of June 11 to July 31, 1952 Docket No. DMEA 2399 Contract No. Idm E 339

Operator's Name THE EAGLE-PICHER CO. Minerals Lead-Zinc

Address GALENA, ILLINOIS

Contract Amount, $ 184,038.00 Government Participation: 50 % Amount, $ 92,019.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	7188.75	none	$ 7188.75	7188.75	None	7188.75
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	1370.00	none	$ 1370.00	1370.00	None	1370.00
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	8558.75	none	$ 8558.75	$8558.75	None	$8558.75

I certify that the above bill is correct and just and that payment therefor has not been received.

Date Sept. 16, 1952 *Payee The Eagle-Picher Co.

Per A. G. Zompkins Title Plant Accountant

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 4279.37

Signature L. A. Hill
(Authorized Certifying Officer)

Date OCT - 2 1952 Vou. No. 12

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm 1-339 in accordance with the terms of the contract.

Signature [illegible] Title Mining Engineer Date 9/25/52

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature [illegible] Title Ex Off Date 10/2/52

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word; such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 6 1952

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of June 11 to July 31 1952 Docket No. DMEA 2399 Contract No. Idm E 339
Operator's Name THE EAGLE-PICHER CO. Minerals Lead - Zinc
Address GALENA, ILLINOIS

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn	FT.	8558.75	4712.5	$8558.75	4712.5	1.816		
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		8558.75		8558.75				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		8558.75		8558.75				$184,038.00

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date Sept. 16, 1952 Operator The Eagle-Picher Co.

Per A. C. Hompkins Title Plant Accountant

REMARKS: Costs authorized by contract are $1.50 per foot of drilling plus $5.00 per hole for plugging; and chief geologist and field geologist salaries totalling $822.00 per mo.

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

U. S. GOVERNMENT PRINTING OFFICE 205676

THE EAGLE-PICHER COMPANY
GALENA, ILLINOIS
Drilling on DMEA Contract June 11 to July 31, 1952

	Hole No.	Depth
Project No. 1		
Henry C. Gray	10	290
"	11	265
"	12	281
"	13	270
"	14	286
John O.Gray	1	245
	Total feet	1637
Project No. 2		
Calvert Estate	2	161
"	3	175
"	4	195
"	5	185
"	24	240
"	25	225
Frances M. Calvert	4	245
"	5	248
"	6	183
	Total feet	1857
Project No. 3		
Verna B. Cole	5	125
"	6	132.5
"	7	130
"	8	132.5
"	9	131
"	10	137.5
"	11	132.5
"	12	137.5
Calvert Estate	15	160
	Total feet	1218.5

GRAND TOTAL FOOTAGE DRILLED 4712.5 Ft.

Drilling Cost	4712.5 ft. @ 1.50 per foot	$ 7068.75
Plugging Holes	24 holes @$5.00 per hole	120.00
	Total Drilling cost	$ 7188.75
Chief Geologist	1 2/3 months @ $425.00	708.33
Field Geologist	1 2/3 months @ $397.00	661.67
	Total Technical Cost	$ 1370.00
	GRAND TOTAL COST for period	$ 8558.75

September 9, '52.

United States Department of the Interior
Defense Minerals Exploration Administration,
Minneapolis, Minnesota.
ATT: MR. A. B. NEEDHAM.

Gentlemen:

The following summaries cover the Assistance Contract DMEA- Eagle-Picher Company drilling for the period of June 11, 1952 to July 31, 1952, Lafayette County, Wisconsin.

LEASE	DRILL HOLE NO.	REMARKS.
Calvert Estate- Tract # 1,	24	No mineralization. Area to west unfavorable.
" "	25	Thin galena & blende mineralization in top of Drab horizon 90'-100' . Open ground in Gray horizon 185'- 195' .
Calvert Estate- Tract # 2,	2	No mineralization. Area to west unfavorable.
" "	3	No mineralization. Area to west unfavorable.
" "	4	Oxidized to top of Blue horizon.
" "	5	Oxidized 0-130' & 152½-172½. Main ore horizons oxidized.
Calvert Estate- Tract # 3,	15	Main ore horizons thick, limy and unmineralized.
Francis M. Clavert,	4	Low grade blende mineralization 212½-222½. Favorable area.
" "	5	Thin Oil & Glass Rock horizons. Traces of blende and galena.
" "	6	Thin Oil and Glass Rock horizons. Blende traces in Blue & Oil horizons. Favorable area.
Verna B. Cole- Tract # 1,	9	Thin Oil and Glass Rock horizons- oxidized.
" "	10	Thick Oil and Glass Rock horizons- no mineralization- unfavorable.

LEASE	DRILL HOLE NO.	REMARKS.
Verna B. Cole-Tract # 2,	5	Trace of blende in Oil Rock. Structure drilling.
" "	6	Marcasite oxidized in Oil & Glass Rock horizons. Structure drilling.
" "	7	Marcasite oxidized in Oil & Glass Rock horizons. Structure drilling.
" "	8	Thin Oil & Glass Rock horizons- trace of marcasite mineralization. Structure drilling.
" "	11	Thin Oil & Glass Rock horizons- trace of marcasite mineralization. Marcasite oxidized to top of Oil Rock. Structure drilling.
" "	12	Much open ground. No Mineralization. Structure drilling.
Henry C. Gray,	10	Thick Oil & Glass Rock horizons. Beds unmineralized.
" "	11	Thin Oil & Glass Rock horizons. Low grade blende mineralization. Structure drilling.
" "	12	Low grade blende mineralization. Hole near west edge of north-south low-grade mineralized trend. Structure drilling.
" "	13	Low grade blende mineralization. Hole at east edge of north-south mineralized trend. Structure drilling.
" "	14	Thick Oil & Glass Rock horizons. Beds unmineralized.
John O. Gray,	1	Thick Oil & Glass Rock horizons. Traces of marcasite throughout hole.

Very truly yours,

THE EAGLE-PICHER COMPANY.

By. J. P. Lyden

J. P. Lyden,
Chief Geologist,
Mining & Smelting Div.

JPL/tp.

WORK PROGRESS REPORT

Docket 2399 Month June - July 1952

Contract Idm R-339 Company Eagle-Picher Co.

Property East of Cuba City

DRILLING - The following holes were completed this period:

Lease	Hole	Date started	Date completed	Depth
Project No. 1:				
Henry C. Gray	10	6/12/52	6/18/52	290
" " "	11	6/23/52	6/27/52	265
" " "	12	6/27/52	7/ 3/52	281
" " "	13	7/ 3/52	7/11/52	270
" " "	14	7/12/52	7/19/52	256
John O. Gray	1	7/21/52	7/26/52	245
Project No. 2:				
Calvert Estate	2	6/13/52	6/19/52	161
" "	3	6/20/52	6/26/52	175
" "	4	6/27/52	7/ 1/52	195
" "	5	7/ 2/52	7/11/52	185
" "	24	7/12/52	7/19/52	240
" "	25	7/21/52	7/24/52	225
F. M. Calvert	4	7/11/52	7/18/52	245
" " "	5	7/21/52	7/25/52	245
" " "	6	7/25/52	7/30/52	183
Project No. 3:				
V. B. Cole	5	6/13/52	6/16/52	125
" " "	6	6/16/52	6/18/52	132½
" " "	7	6/18/52	6/23/52	130
" " "	8	6/24/52	6/26/52	132½
" " "	9	6/30/52	7 /1/52	131
" " "	10	7/ 2/52	7/ 3/52	137½
" " "	11	7/ 5/52	7/ 8/52	132½
" " "	12	7/ 8/52	7/10/52	137½
Calvert Estate	15	7/25/52	7/29/52	160

The following holes were in progress this period, but not completed:

Lease	Hole	Date started	Footage reported	Remarks
R. F. Houtakker	1	7/28/52	155	
F. M. Calvert	7	7/30/52	70	
Calvert Estate	16	7/29/52	125	

TOTAL (completed)(~~[illegible]~~) footage this period 4,712½ to date 4,712½
Scratch one

All work was performed in a satisfactory manner and the attached Form MF-104, Monthly Report, constituting certified invoice, rendered by the contractor under date of September 16, 19 52, totalling $ 5,558.75, has been carefully checked and approved by me.

APPROVED BY:

H. J. Schroeder

Harold J. Schroeder, Mining Engineer

W. A. Broughton

W. A. Broughton, Geologist

JUL 2 8 1952

Mr. A. B. Needham
Executive Officer
IMEA Field Team, Region V
2908 Colfax Avenue, South
Minneapolis, 8, Minnesota

Re: Docket IMEA-2399
Contract Ida-F339
The Eagle-Picher Company

Dear Mr. Needham:

Reference is made to your letter of July 22, 1952, addressed to The Eagle Picher Company waiving the requirement for documentation in support of the Monthly Report and Voucher Form MF-104.

Inasmuch as the contract is on the Short Form MF-200(A), which provides for payment by the Government of 90 per cent of the agreed estimated costs for units of work actually performed, the necessity of waiving documentation requirements is not understood. Since payment is to be made on the basis of the units of work actually performed no documentation is required.

If you will refer to the last paragraph on the reverse of Form MF-104(Rev.) April, 1952, you will note the following statement: "Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind". There follows after this statement an example of how the operator should present his claim. In this particular case, since several different units of work are involved, as well as salaries on a unit basis, it will be necessary for the operator to cross out the words "bulldozing", "crosscutting", and "drifting" as they appear under item (1) on the MF-104 and use these lines for the several units of work including the unit salaries of the Chief Field Geologist and Field Geologist.

Sincerely yours,

Signed

E. D. Talbert, Assistant Chief
Contract Administration and
Audit Division

EDTalbert/ama
July 25, 1952

Copy to: Admr. Reading File
Mails and Files
Mr. Chambers

JUN 1 3 1962

The Eagle-Picher Company
Mining and Smelting Division
Box 910
Miami, Oklahoma

Re: OME-2399 (Lead-Zinc)
The Eagle-Picher Company
Calvert-Ralph Ore Body
LaFayette County, Wisconsin
Contract Lzn-2339

Gentlemen:

By the terms of the subject Exploration Project Contract, as amended, and the certification of discovery or development, dated September 3, 1954, all minerals mined or produced from June 11, 1952, to June 11, 1962, were subject to the Government's percentage royalty as set forth in said contract.

As the period during which production was subject to royalty has now expired, the Government according to its present records retains no claim or lien against the property subject to the contract or any future production therefrom. Your attention, however, is called to the provisions of the contract which require the Operator to keep and preserve certain records for the periods indicated.

Sincerely yours,

George Fumich, Jr.

Director

GLAult/a
6-7-62
cc to: Director's Reading File
Contract Division
Region IV (2) w/ cy MME Form 63, dated May 29, 1962
Docket
Code 500

GOVERNMENT COPY

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

[illegible]

To: [illegible]
[illegible]
[illegible]
[illegible]
[illegible]

Pursuant to the provisions of [illegible] contract [illegible], dated June 11, 1952, [illegible], hereinafter called the "Contract", between you and the United States of America, hereinafter called the "Government"; to establish [illegible] the Government's [illegible] royalty on production and its lien thereon and on the land described in the contract, the Government considers and therefore certifies that discovery or development [illegible] production may be made has resulted from the exploration work.

The nature of said discovery or development is described [illegible] or indicated as follows: [illegible] drilling on the [illegible] Albert and Clarence [illegible] leases, located in the [illegible] of section [illegible], [illegible] North, [illegible] West, of the 4th P. M., Lafayette County, Missouri, has shown the existence of zinc ores, with auxiliary amounts of lead, occurring as replacements within a series of dolomitic rocks.

Larger amounts of zinc ores were also encountered by churn drilling on the [illegible] Albert Bat to lease, located [illegible] of section [illegible], [illegible] North, [illegible] West; and on the [illegible] and [illegible] Mark [illegible] lease, located in the [illegible] of the [illegible] of section [illegible], [illegible] North, [illegible] West.

Dated: SEP 3 - 1954

[illegible]

By [illegible]
Administrator, Defense Mineral Exploration Administration

[illegible]
[illegible]
[illegible]
[illegible]
[illegible] Kiilsgaard, Rm. 5227
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UNITED STATES 500
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

SEP 7 1954

Mr. Irving Gumbel, Acting Director
Materials Division
Emergency Procurement Service
General Services Administration
Washington 25, D. C.

Re: Docket No. DMEA-2399 (Lead-Zinc)
The Eagle-Picher Company
Calvert-Ralph Orebody
Lafayette County, Wisconsin
Contract No. Idm-E339

My dear Mr. Gumbel:

Enclosed is a copy of a certification of discovery or development related to Exploration Project Contract No. Idm-E339.

The contract was dated June 11, 1952, with the Government participating to the extent of 50 per cent in an exploration project estimated to cost $191,230.78. Actual expenditures were $67,957.76, with the Government's share being half of such amount, or $33,978.88.

The total amount of work provided for under the contract consisted of 110,658 feet of churn drilling. Work actually done totalled 35,278 feet of churn drilling, after which the contract was terminated by mutual agreement.

The discovery is reported to consist of 466,506 tons of ore with a grade of 4.98 per cent zinc, occurring as replacements within dolomitic rocks.

Sincerely yours,

S. G. Mittendorf

Administrator

Enclosure

WRGriswold/bjl (7/26/54)
Copy to: Docket
Cont. Adm.&Audit Div.
Reg. V (2)
Base Metals
Admr. R. File
Op. Committee
Mr. Hedges (4604)
Mr. Kiilsgaard, Rm. 5227
F. E. Johnson
W. R. Griswold
Chron.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

Mr. O. A. Rockwell
The Eagle-Picher Company
Mining & Smelting Division
First National Bank Building
Miami, Oklahoma

SEP 7 1954

Re: Docket No. DMEA-2399 (Lead-Zinc)
The Eagle-Picher Company
Calvert-Ralph Orebody
Lafayette County, Wisconsin
Contract No. Idm-E339

Dear Mr. Rockwell:

Transmitted herewith is a certification of discovery or development related to the Exploration Project Contract No. Idm-E339, dated June 11, 1952, on the lands described in the contract.

By the terms of the Exploration Project Contract and of the Certification, all production from the land described in the contract after June 11, 1952, the date of the contract, is subject to the Government's percentage royalty as set forth in the said contract until the sum of $33,978.88 which the Government has advanced as its participating interest is repaid, or until June 11, 1962, whichever occurs first.

Payments should be made to Mr. A. B. Needham, Executive Officer, DMEA Field Team, Region V, 2908 Colfax Avenue, South, Minneapolis 8, Minnesota. Checks should be drawn in favor of the Defense Minerals Exploration Administration. The purchaser should be advised to deduct royalties from the amount due on each shipment and forward the checks to the Executive Officer.

Royalty payments to the Government should be accompanied by suitable evidence, such as copies of settlement sheets, showing quantity and grade of the products sold, the name of the purchaser, and the price and charges, certified to be correct by the purchaser.

You are requested to notify Mr. Needham of any changes in ownership or production rights that might affect the Government's right to its percentage royalty. Also, if production ceases at any time for an extended period please notify Mr. Needham at six-month intervals that such is the case.

Sincerely yours,
C. O. Mittendorf

Administrator

Enclosure

F. E. Johnson
W. R. Griswold
Base Metals
Chron.

Admr. R. File
Op. Committee
Cont.Adm.&Audit Div.
Finance Office
Region V (2)

RGriswold/bjl (7/26/54)
Copy to: Docket
Mr. Gumbel, Dr., MD, EPS
Mr. Hedges, 4604
Mr. Kilsgaard, 5227

Government's Copy

Department of the Interior
Defense Minerals Administration
RECEIVED
APR 28 1954

TERMINATION AGREEMENT

It is agreed this 9th day of April, 1954, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration (hereinafter called the "Government"), and The Eagle-Picher Company (hereinafter called the "Operator"), parties to that certain Exploration Project Contract Idm-E339, Docket No. DMEA-2399, dated June 11, 1952, as amended (hereinafter called the "Contract"), that:

1. All work and operations provided for in the Contract shall be terminated as of February 4, 1954.

2. The Operator shall promptly render to the Government a full and final report and a final accounting of the units of work performed under the Contract up to and including February 4, 1954. Any units of work performed after February 4, 1954, shall be for the sole account of the Operator without contribution by the Government.

3. The Operator hereby releases and agrees to save the Government harmless from all claims or demands under or arising out of the Contract, except as herein otherwise provided.

4. All rights of the Government with respect to certification of discovery or development, percentage royalty, and lien for payment, as provided in the Contract, are preserved.

IN WITNESS WHEREOF, these parties have executed this agreement as of the day and year first above written.

THE UNITED STATES OF AMERICA

By O Mitchendon
Administrator, Defense
Minerals Exploration
Administration

THE EAGLE-PICHER COMPANY

By O. A. Rockwell

Government's Copy

EXPLORATION PROJECT CONTRACT
EAGLE-PICHER COMPANY
DOCKET NO. DMEA-2399

AMENDMENT NO. 1

It is agreed this 12th day of November, 1952, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration and the Eagle-Picher Company, each acting in consideration of the agreement of the other to the terms hereinafter set forth that the Exploration Project Contract Idm-E339, Docket No. DMEA-2399, dated June 11, 1952, between the parties hereto be modified and amended as of said date as follows:

1. Exhibit "A" - Estimated Costs of Project. Delete pages 2 and 3 and substitute the same numbered pages attached hereto and made a part hereof, which increase the drilling costs per foot from $1.50 to $1.565, thereby increasing total cost of the work in each area, total cost of project, and total cost of Government participation.

2. In Article 4:

Delete $92,019.00 and substitute $95,615.39.

Delete $184,038.00 and substitute $191,230.78.

UNITED STATES OF AMERICA

By O. Meitzendorf
Administrator, Defense
Minerals Exploration
Administration

EAGLE-PICHER COMPANY

By [illegible]

Estimated Costs of Project

Area 1

Preliminary pattern drilling - 11 churn drill holes, 3,020 ft. @ $1.565/ft.	$ 4,726.30	
Structure drilling - 22 churn drill holes 6,040 ft. @ $1.565/ft.	9,452.60	
Drilling to delineate the ore bodies, 31 churn drill holes, 8,510 ft. @ $1.565/ft.	13,318.15	
Total cost for churn drilling Area 1	$27,497.05	
Plugging drill holes, 64 holes @ $5.00 per hole	320.00	
Total Cost, Area 1		$27,817.05

Area 2

Preliminary pattern drilling - 19 churn drill holes, 3,985 ft. @ $1.565/ft.	$ 6,236.525	
Structure drilling - 38 churn drill holes 7,970 ft. @ $1.565/ft.	12,473.05	
Drilling to delineate the ore bodies, 95 churn drill holes, 19,925 ft. @ $1.565/ft.	31,182.625	
Total Cost for churn drilling Area 2	$49,892.20	
Plugging drill holes, 152 holes @ $5.00 per hole	760.00	
Total Cost, Area 2		50,652.20

Area 3

Preliminary pattern drilling - 53 churn drill holes, 7,575 ft. @ $1.565/ft.	$11,854.875	
Structure drilling - 106 churn drill holes, 15,150 ft. @ $1.565/ft.	23,709.75	
Drilling to delineate the ore bodies, 228 churn drill holes, 32,586ft. @ $1.565/ft.	50,997.09	
Total cost for churn drilling Area 3	$86,561.72	
Plugging drill holes, 387 holes @ $5.00 per hole	1,935.00	
Total Cost, Area 3		88,496.72

Area 4

Preliminary pattern drilling - 7 churn drill holes, 860 ft. @ $1.565/ft.	$ 1,345.90	
Structure drilling - 14 churn drill holes, 1,720 ft. @ $1.565/ft.	2,691.80	
Drilling to delineate the ore bodies, 27 churn drill holes, 3,317 ft. @ $1.565/ft.	5,191.105	
Total cost for churn drilling Area 4	$ 9,228.81	
Plugging drill holes, 48 holes @ $5.00 per hole	240.00	
Total Cost, Area 4		$ 9,468.81
Chief field geologist at not to exceed $425.00 per month for a maximum of 18 months	$ 7,650.00	
Field geologist at not to exceed $397.00 per month for a maximum of 18 months	7,146.00	
Total Cost, Geologists		14,796.00

NOTE: For the purposes of this contract, one month's services of a geologist represents a unit of work. The Government will contribute to these agreed, estimated costs, as they accrue, in lieu of actual costs.

Total Cost of the Project	$191,230.78
Government Participation @ 50%	$ 95,615.39

Docket No. 2399

Commodity Lead - Zinc

DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

STRATEGIC AND CRITICAL MINERALS EXPLORATION PROGRAM

TO: Chief, Finance Section, Budget and Finance Branch, Bureau of Mines

Please enter on the records of the Defense Minerals Exploration Administration under the Strategic and Critical Minerals Exploration Program, the following contract, or amendment to contract.

Contract No. Idm-E ~~339~~

Date of Contract ~~or Amendment~~ Nov. 12, 1952

Name and Address of Operator:

Anglo - Pitcher Co.
First National Bank Bldg.,
Miami, Oklahoma

Amount of Government participation $95,615.39

Percent of Government participation 50 %

Region: V State: Wisconsin

Note: Please release $ 61,636.51; Advise Contract Administration and Audit Division

J. R. Chambers (Name)
Chief, Contract Administration and Audit Division

(Title)

Date Delivered to Bureau of Mines, Washington. 4/20/54

54458

Docket No. [illegible]

Commodity [illegible]

DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

STRATEGIC AND CRITICAL MINERALS EXPLORATION PROGRAM

TO: Chief, Finance Section, Budget and Finance Branch, Bureau of Mines

Please enter on the records of the Defense Minerals Exploration Administration, under the Strategic and Critical Minerals Exploration Program, the following contract, or amendment to contract.

Contract No. Idm-E [illegible]

Date of ~~Contract or~~ Amendment: [illegible]

Name and Address of Operator:

[illegible]

Amount of Government participation ____ $ [illegible]

Percent of Government participation [illegible] %

Region: State:

Note: This document establishes the collection date and cancels the previous collection of [illegible]

(Name)

[illegible]
Acting Chief, Contract Administration and Audit Division

(Title)

Date Delivered to Bureau of Mines, Washington. [illegible] 13908

Docket No. 2399

Commodity Lead-Zinc

DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

STRATEGIC AND CRITICAL MINERALS EXPLORATION PROGRAM

TO: Chief, Finance Section, Budget and Finance Branch, Bureau of Mines

Please enter on the records of the Defense Minerals Exploration Administration, under the Strategic and Critical Minerals Exploration Program, the following contract, or amendment to contract.

Contract No. Idm-E 339

Date of Contract ~~Amendment~~ June 11, 1952

Name and Address of Operator:
The Eagle-Picher Co.
Mining and Smelting Division
First National Bank Building
Miami, Oklahoma

Amount of Government participation $ 92,019.00

Percent of Government participation 50 %

Region: V State: Wisconsin

for J.L. (Name) Chambers
Chief, Contract Administration and Audit Division

(Title)

Date Delivered to Bureau of Mines, Washington. June 11, 1952 13908

MF-200 (A)
(February 1952)

DOCKET NO. DMEA 2399

COMMODITY Lead-Zinc

Idm-E339

Government's copy

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

EXPLORATION PROJECT CONTRACT[1]
(Short Form)

IT IS AGREED this 11th day of June, 1952, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and[2] The Eagle-Picher Company, an Ohio corporation
Mining and Smelting Division
First National Bank Building
Miami, Oklahoma

hereinafter called the "Operator," as follows:

ARTICLE 1. *Authority for contract.*—This agreement is entered into under the authority of the Defense Production Act of 1950, as amended, pursuant to DMEA Order 1 entitled "Government Aid in Defense Exploration Projects."

ARTICLE 2. *Operator's property rights.*—With respect to that certain land situated in the State of Wisconsin, County of Lafayette, described as follows:[3]

See Appendix I and the map attached to and made a part of this contract.

the Operator represents and undertakes:[4]

~~(a) That the Operator is the owner in possession and entitled to possession, and has a valid and subsisting claim to the following claims, being unexpired and in each of which the subsidiary [illegible]~~

Operator's Guaranty

(*b*) That the Operator is a lessee, in possession and entitled to possession, and the ~~Owner's Guaranty~~ is attached.

The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof.

ARTICLE 3. *Exploration project.*—The Operator, within Two days from the date of this contract shall commence work on a project of exploration for[5] Lead-zinc

in or upon the described land; and shall bring the project to completion within a period of 24 months from the date of this contract. The work to be performed is more fully described in Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, are made a part of this contract. The Government will contribute to the cost of this work as hereafter provided. The work shall be performed by the Operator or by independent contractor or contractors efficiently, expertly, in a workmanlike manner, in accordance with good mining standards and State regulations for health and safety and for workmen's compensation and employers' liability insurance, with suitable and adequate equipment, materials, and labor, to bring the project to completion within the time fixed. The Government shall have the right to enter and observe and inspect the work at all reasonable times, and the Operator shall provide the Government with all available means for doing so. The Government may consult with and advise the Operator on all phases of the work.

ARTICLE 4. *Costs of the project.*—The agreed, estimated costs of performing the work, expressed in terms of units of work to be performed (per foot of drifting, per foot of drilling, per cubic yard of material to be moved, etc.) are set forth in Exhibit "A," attached hereto. The Government will pay 50 percent of these agreed, estimated costs, as they accrue, for units of work actually performed that conform with the description or specifications for the work set forth in this contract, in an aggregate total amount not in excess of $92,019.00 which is 50 percent of $184,038.00 the agreed, estimated total cost of the project in which the Government will participate: *Provided,* That until the Operator's final report and final accounting have been rendered to the Government and any final check or auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of ten (10) percent of the maximum total which the Government might have been called upon to pay under the terms of the contract. The Government may, as it sees fit, make payments direct to the Operator's independent contractors, if any, for the account of the Operator, rather than to the Operator.

ARTICLE 5. *Reports, accounts, audits.*—(*a*) *Progress reports.* The Operator shall provide the Government with monthly reports of units of work performed under the contract, in quintuplicate (five copies), upon forms provided by the Government. These progress reports shall be certified by the Operator, and shall constitute both the Operator's invoice of units of work performed on the project during the period covered by the report and his voucher for repayment by the Government, unless the Government requires the use of a standard voucher form with invoice attached. Progress reports shall include surface and/or underground engineering-geological maps or sketches showing the progress of the exploration, with assay-reports on samples taken concurrently with the advance in mineralized ground.

[1] If sufficient space is not provided in any blank, use an extra sheet of paper and refer to it in the blank.
[2] State name, address, and nature of organization if any.
[3] Give legal description or enough to identify the property, particularly excluding any land or interest therein to which the Government's lien is not to attach or the production from which is not to be subject to the Government's percentage royalty.
[4] Strike out the provision not applicable.
[5] Name of mineral or minerals.

(*b*) *Final report.*—Upon completion of the exploration work or termination of the contract the Operator shall provide the Government with an adequate geological and engineering report, in quintuplicate (five copies), including an estimate of ore reserves resulting from the exploration work.

(*c*) *Compliance with requirements.*—If, in the opinion of the Government, any of the Operator's reports are insufficient or incomplete, the Government may procure the making or completion of such reports and attachments as an expense of the exploration work; and the Government may withhold approval and payment of any vouchers depending upon insufficient or incomplete reports.

(*d*) *Accounts and audits.*—The Operator shall keep suitable records and accounts of the units of work performed, which the Government may inspect and audit at any time. The Government may at any time require a check of the work performed and an audit of the Operator's records and accounts, by a certified public accountant or otherwise, the cost thereof to be treated as a cost of the project. The Operator shall keep and preserve said records and accounts for at least 3 years after the completion of the project or the termination of this contract. Upon the completion of the project or termination of the contract the Operator shall render a final account and statement of work performed to accompany his final report.

ARTICLE 6. *Repayment by Operator.*—(*a*) If, at any time, the Government considers that a discovery or a development from which production may be made has resulted from the exploration work, the Government, at any time not later than 6 months after the Operator has rendered the required final report and final account, may so certify in writing to the Operator. The certification shall describe broadly or indicate the nature of the discovery or development. In the event of such certification, any minerals mined or produced from the land described in Article 2 within 10 years from the date of this contract, including any mined or produced before the certification, shall be subject to a percentage royalty which the Operator or his successor in interest shall pay to the Government, upon the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production, in whatever form disposed of, including ore, concentrates, or metal, until the total amount contributed by the Government, without interest, is fully repaid, or said 10 years have elapsed, whichever occurs first, as follows:

(1) One and one-half (1½) percent of any such net amounts not in excess of eight dollars ($8.00) per ton.

(2) One and one-half (1½) percent of any such net amounts, plus one-half (½) percent of such net amounts for each additional full fifty cents ($0.50) by which such net amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) percent of such net amounts.

(For instance: The percentage royalty on a net amount of five dollars ($5.00) per ton, would be one and one-half (1½) percent; on a net amount of ten dollars ($10.00) per ton, three and one-half (3½) percent.)

(*b*) As here used, "net smelter returns," "net concentrator returns," and "other net amounts realized from the sale or other disposition," mean gross revenue from sales, or if not sold, the market value of the material after it is mined in the form in which and the place where it is held. In the case of integrated operations in which the material is not disposed of as such, these terms mean what is or would be the gross income from mining operations for percentage depletion purposes in income-tax determination.

(*c*) To secure the payment of its percentage royalty, the Government shall have and is hereby granted a lien upon the land described in Article 2 and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

(*d*) This article is not to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations.

ARTICLE 7. *Assignment, transfer, or loss of Operator's interest.*—Without the written consent of the Government, the Operator shall not assign or otherwise transfer or hypothecate this contract or any rights thereunder. The Operator shall not make any voluntary nor permit any involuntary transfer or conveyance of the Operator's rights in the land described in Article 2, without making suitable provision for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof; *Provided*, that mere failure by the Operator to maintain the Operator's rights in the land, without any consideration running to the Operator other than relief from the cost of maintaining such rights (as by surrender of a leasehold, failure to perform assessment work, or failure to exercise an option), coupled with complete abandonment by the Operator of all interest in or operations on the land for a period of 10 years from the date of this contract, shall not constitute such a transfer or conveyance. Should the Operator make or permit any transfer or conveyance in violation of this provision, the Operator shall be and remain liable for payment to the Government of the same amounts, at the same times, as would have been paid under the terms of the percentage royalty on production. If for any reason the net smelter returns, net concentrator returns, or other net amounts realized from the sale or other disposition of such production are not available as a means of measuring the amount of the Operator's liability, the amount thereof shall be estimated as well as may be, and in the event of dispute as to such estimates, the determination thereof by the Administrator of Defense Minerals Exploration Administration or by his successor shall be final and binding upon the Operator.

ARTICLE 8. *Termination and completion.*—The Government may, at any time, by written notice to the Operator, terminate this contract: (*a*) If the Operator fails to provide his share of the money necessary to prosecute operations pursuant to the terms of the contract; (*b*) if the Operator, in the opinion of the Government, fails to prosecute operations pursuant to the terms of the contract; or (*c*) if, in the opinion of the Government, operations up to the time of the notice have not indicated the probability of making any worth while discovery and in the opinion of the Government further operations are not justified.

ARTICLE 9. *Changes and added provisions* _____

Executed in sextuplicate the day and year first above written.

THE EAGLE-PICHER COMPANY
(Operator)

By _____

THE UNITED STATES OF AMERICA

By _____
Acting Administrator
Defense Minerals Exploration
Administration

I, _____, certify that I am the asst secretary of the corporation named as Operator herein; that _____, who signed this contract on behalf of the Operator, was then _____ of said corporation; that said contract was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

Kenneth E. Kunne [CORPORATE SEAL]

U. S. GOVERNMENT PRINTING OFFICE 16—66329-1

APPENDIX I

Area I - Leases

1. Lease dated March 26, 1951, from Raymond B. Houtakker, et ux, Lessors, to The Eagle-Picher Mining and Smelting Company, Lessee, upon the following described lands:

   The North half of the Fractional Northwest quarter of the Northwest quarter of Section Seven (7); and the Fractional Southwest quarter of the Southwest quarter of Section Six (6); all in Township One (1) North, Range One (1) East, Lafayette County, Wisconsin,

   Acres 54.97

2. Lease dated November 1, 1951, from John O. Gray, et ux, Lessors, to The Eagle-Picher Mining and Smelting Company, Lessee, upon the following described lands:

   The South half of the Fractional Northwest quarter of the Northwest quarter (18.18 acres), and the North 9.52 acres of the Fractional Southwest quarter of the Northwest quarter; all in Section Seven (7), Township One (1) North, Range One (1) East of the 4th P.M., LaFayette County, Wisconsin, and containing in all 27.70 acres,

   Acres 27.70

3. Lease dated April 2, 1951, from Henry C. Gray, et ux, Lessors, to The Eagle-Picher Mining and Smelting Company, Lessee, upon the following described lands:

   The South twenty-seven (27) acres, more or less, of the Fractional Southwest quarter of the Northwest quarter; and the Fractional Northwest quarter of the Southwest quarter, containing 36.68 acres, and the Fractional Southwest quarter of the Southwest quarter, containing 36.84 acres; all in Section Seven (7), Township One (1) North, Range One (1) East of the 4th P.M., Lafayette County, Wisconsin, and containing in all 100.52 acres, more or less,

   Acres 100.52

Total Acreage 183.19

Area 2 - Leases

1. Lease dated April 2, 1951, from Francis M. Calvert, et ux, Lessors, to The Eagle-Picher Mining and Smelting Company, Lessee, upon the following described lands:

   Part of the Northeast Quarter of Section Six (6), Township One (1) North, Range One (1) East of the 4th P.M., Lafayette County, Wisconsin, described as follows: Beginning at the northeast corner of the Southeast quarter of said Section Six (6), thence West 92.33 rods for a place of beginning, thence North 56.50 rods; thence East 40 rods, thence North 22 degrees West 19.21 rods, thence West 34 rods, thence North 56 rods, thence West 68 rods, thence South 130.33 rods, thence East 68 rods to place of beginning, containing 59.36 acres; Also, the West half of the Southeast quarter of Section Six (6), Township One (1) North, Range One (1) East of the 4th P.M., Lafayette County, Wisconsin, containing 80 acres, and containing in all 139.36 acres,

   Acres 139.36

2. Lease dated April 10, 1951, from Clarence P. Ralph, et ux, Lessors, to The Eagle-Picher Mining and Smelting Company, Lessee, upon the following described lands:

   The East half of the Southeast Quarter (80 acres); and the East 12 rods of the South 50.50 rods of the Southwest quarter of the Northeast quarter (3.80 acres); and that part of the Southeast quarter of the Northeast quarter, commencing at the southeast corner of said Forty acres, thence North 14.24 rods, thence North 25 degrees 30 minutes West 40.74 rods, thence West 55.05 rods, thence South 50.50 rods, thence East 80 rods to place of beginning (26.20 acres); all in Section Six (6), Township One (1) North, Range One (1) East of the 4th P.M., Lafayette County, Wisconsin, and containing in all 110 acres,

   Acres 110.00

3. Lease dated April 25, 1951, from William H. Calvert, et al, Lessors, to The Eagle-Picher Mining and Smelting Company, Lessee, upon the following described lands:

Tract No. 1:

The Northeast quarter of Section Seven (7), Township One (1) North, Range One (1) East of the 4th P.M., containing 160 acres, more or less,

Tract No. 2:

The Northwest quarter of Section Eight (8), Township One (1) North, Range One (1) East of the 4th P.M., containing 160 acres, more or less,

Acres 320.00

Total Acreage 569.36

Area 3 - Leases

1. Lease dated April 14, 1951, from William F. Snyder, et ux, Lessors, to The Eagle-Picher Mining and Smelting Company, Lessee, upon the following described lands:

The West half of the Southeast quarter of Section Thirty (30), Township Two (2) North, Range One (1) East of the 4th P.M., Lafayette County, Wisconsin, containing 80 acres, Acres 80.00

2. Lease dated April 25, 1951, from Arnold J. Splinter, et ux, Lessors, to The Eagle-Picher Mining and Smelting Company, Lessee, upon the following described lands:

The fractional West half of the Northwest quarter of Section Thirty-one (31), Township Two (2) North, Range One (1) East of the 4th P.M., Lafayette County, Wisconsin, (Less Railroad) containing 72.52 acres, more or less,

Acres 72.52

3. Lease dated April 14, 1951, from Verna B. Cole, et vir, Lessors, to The Eagle-Picher Mining and Smelting Company, Lessee, upon the following described lands:

The Southeast quarter of the Northeast quarter, and the Northeast quarter of the Southeast quarter of Section Thirty-one (31), Township Two (2) North, Range One (1) East of the 4th P.M., Lafayette County, Wisconsin, containing 80 acres, more or less,

Acres 80.00

4. Lease dated April 27, 1951, from Henry V. Hinderman, et ux, Lessors, to The Eagle-Picher Mining and Smelting Company, Lessee, upon the following described lands:

The Northeast quarter of the Northeast quarter and the West half of the Northeast quarter of Section Thirty-one (31), Township Two (2) North, Range One (1) East of the 4th P.M., Lafayette County, Wisconsin, containing 120 acres, more or less,

Acres 120.00

5. Lease dated April 11, 1951, from Clarence J. Busch, et ux, Lessors, to The Eagle-Picher Mining and Smelting Company, Lessee, upon the following described lands:

The fractional Northeast quarter of the Northwest quarter of Section Six (6), Township One (1) North, Range One (1) East, containing 42.02 acres; and the Southwest quarter of the Southeast quarter and the East half of the Southwest quarter of Section Thirty-one (31), Township Two (2) North, Range One (1) East, less Railroad right-of-way, containing 117 acres, all in Lafayette County, Wisconsin, and containing in all 159.20 acres, more or less,

Acres 159.20

6. Lease dated April 12, 1951, from Charles Curtis, et ux, Lessors, to The Eagle-Picher Mining and Smelting Company, Lessee, upon the following described lands:

The Northwest quarter of the Southeast quarter (less Railroad right-of-way) of Section Thirty-one (31), Township Two (2) North, Range One (1) East of the 4th P.M., Lafayette County, Wisconsin, containing 39 acres,

Acres 39.00

7. Lease dated April 14, 1951, from Verna B. Cole, et vir, Lessors, to The Eagle-Picher Mining and Smelting Company, Lessee, upon the following described lands:

The East half of the Northwest quarter of Section Thirty-one (31), Township Two (2) North, Range One (1) East of the 4th P.M., Lafayette County, Wisconsin, containing 80 acres, more or less,

Acres 80.00

8. Lease dated April 16, 1951, from Delmar J. Heim, et ux, Lessors, to The Eagle-Picher Mining and Smelting Company, Lessee, upon the following described lands:

The South half of the Northwest quarter and the Southwest quarter of the Northeast quarter of Section Thirty-two (32), Township Two (2) North, Range One (1) East of the 4th P.M., Lafayette County, Wisconsin, containing 120 acres, more or less,

Acres 120.00

9. Lease dated April 25, 1951, from Fred W. Wilkinson, et ux, Lessors, to The Eagle-Picher Mining and Smelting Company, Lessee, upon the following described lands:

The North half of the Southwest quarter of Section Thirty-two (32), Township Two (2) North, Range One (1) East of the 4th P.M., Lafayette County, Wisconsin, containing 80 acres, more or less,

Acres 80.00

10. Lease dated April 25, 1951, from Fred W. Wilkinson, et al, Lessors, to The Eagle-Picher Mining and Smelting Company, Lessee, upon the following described lands:

Part of the Southwest quarter of the Southeast quarter of Section 32-2-1, described as follows: Beginning at the southwest corner of the said Southwest quarter of the Southeast quarter, thence east 6 rods, thence north 40 rods, thence west 6 rods and thence south 40 rods to the place of beginning.

Also: The South half of the Southwest quarter of Section 32-2-1, excepting therefrom a tract described as follows: Beginning at the northeast corner of the said South half of the Southwest quarter, thence west 6 rods, thence south 40 rods, thence east 6 rods, and thence north 40 rods to the place of beginning -

the town and range above referred to being Town 2 North, Range 1 East of the 4th P.M. - Lafayette County, Wisconsin, Acres 80.00

11. Lease dated April 6, 1951, from Vincent Pinch, et ux, Lessors, to The Eagle-Picher Mining and Smelting Company, Lessee, upon the following described lands:

That part of the Fractional Northeast quarter of the Northeast quarter of Section Five (5), Township One (1) North, Range One (1) East, commencing at the southwest corner of said forty acres, thence East four (4) rods, thence North 26.60 rods, thence South 76 degrees West to the 1/8th line, thence South to the place of beginning, being 0.66 acres; Also, that part of the Fractional Northwest quarter of the Northeast quarter of said Section Five, commencing at the southwest corner of said forty acres, thence North 12.75 rods, thence East 36 rods, thence North

76 degrees East 45.32 rods to the 1/8th line, thence South to the southeast corner of said forty acres, thence West 80 rods to the place of beginning, being 8.35 acres; Also, the South half of the Northeast quarter of said Section Five (5), Township One (1) North, Range One (1) East, containing 80 acres; Also, the Fractional Northeast quarter of the Northwest quarter of said Section Five, containing 45.08 acres; Also, the East 5.30 acres of the Northwest quarter of the Northwest quarter of said Section Five (5), Township One (1) North, Range One (1) East, all of said land being in Lafayette County, Wisconsin, and containing in all 139.39 acres,

Acres 139.39

12. Lease dated April 25, 1951, from Bessie Wiseman, a single woman, Lessor, to The Eagle-Picher Mining and Smelting Company, Lessee, upon the following described lands:

The fractional Northeast quarter of the Northeast quarter, except a tract of land commencing at the southwest corner of said quarter quarter section, thence East four (4) rods, thence North twenty-six and sixty hundredths (26.60) rods, thence South 76 degrees West to the one-eighth line, thence South to the place of beginning (44.06 acres); Also, the fractional Northwest quarter of the Northeast quarter, excepting a tract commencing at the southeast corner of said quarter quarter section, thence West eighty (80) rods, thence North twelve and seventy-five hundredths (12.75) rods, thence East thirty-six (36) rods, thence North 76 degrees East forty-five and thirty-two hundredths (45.32) rods to the one-eighth line, thence South to place of beginning (36.55 acres); all in Section Five (5), Township One (1) North, Range One (1) East of the 4th P.M., Lafayette County, Wisconsin, containing in all 80.61 acres, and being all of the

land of Lessor located in said Section Five (5), Township One (1) North, Range One (1) East in said County and State,

Acres 80.61

13. Lease dated April 25, 1951, from William H. Calvert, et al, Lessors, to The Eagle-Picher Mining and Smelting Company, Lessee, upon the following described lands:

Tract No. 3:

The Southwest quarter of the Northwest quarter, excepting the following described tract of land: Commencing at the northwest corner of said forty acre tract, thence South 35.28 rods, thence North 50 degrees 30 minutes East 52.80 rods, thence West 40 rods to the beginning, and also, excepting Railroad right-of-way:

The Southeast quarter of the Northwest quarter; and the Southeast quarter; all in Section Five (5), Township One (1) North, Range One (1) East, and containing in all 235.21 acres, more or less,

Acres 235.61

Total Acreage 1,366.43

Area 4 - Leases

1. Lease dated April 19, 1951, from Fred Heim, a single man, Lessor, to The Eagle-Picher Mining and Smelting Company, Lessee, upon the following described lands:

The Southeast quarter of Section Twenty-nine (29), Township Two (2) North, Range One (1) East of the 4th P.M., Lafayette County, Wisconsin, containing 160 acres,

Acres 160.00

Total Acreage 160.00

EXPLORATION PROJECT CONTRACT
THE EAGLE-PICHER COMPANY
DOCKET NO. DMEA-2399

EXHIBIT "A"

Description of the Work

The purpose of the exploration work is to explore for a zinc-lead orebody. All exploration work will be done by churn drilling from the surface. The drilling shall be done in four areas of work. Each area of work is described in Appendix I and is identified by numbers 1 through 4 on the attached map. The work in each area is divided into three classifications of drilling as follows: First, preliminary pattern drilling; second, structure drilling; and third, drilling to delineate the orebodies.

The preliminary pattern drilling work in the four areas is indicated on the attached map, where the approximate drill hole locations are shown by circles and the approximate depth in feet to be drilled is shown at each location. This drilling, which will be done first, may be conducted simultaneously in all four areas of work.

Drilling under the second and third classifications in any area of work will be done only in the event, that the applicant and the Government mutually agree that results from drilling under the preceding classification warrant the continuation of such drilling. This drilling may be conducted simultaneously in all four areas of work.

Structure drilling will follow the pattern drilling and will be laid out to outline more closely the structures and extent of mineralization which have been disclosed by pattern drilling. Twice as many drill holes have been allotted for structure drilling in each area of work as have been allotted for pattern drilling. The average depth of the structure drill holes shall be the same as the average depth of the pattern drill holes. The locations of these holes shall be approved in advance by the Government.

Drilling to delineate the ore bodies will be done after structure drilling is completed. One drill hole for every 6 acres of land is allotted to each area of work for this purpose. The average depth of this type of drill hole shall be the same as the average depth of the pattern drill holes. The locations of these holes shall be approved in advance by the Government.

All drill holes shall be plugged.

Estimated Costs of Project

Area 1

Preliminary pattern drilling - 11 churn drill holes, 3,020 ft. @ $1.50 per foot	$ 4,530.00	
Structure drilling - 22 churn drill holes, 6,040 ft. @ $1.50 per foot	9,060.00	
Drilling to delineate the ore bodies, 31 churn drill holes, 8,510 ft. @ $1.50 per foot	12,765.00	
Total cost for churn drilling, Area 1	$26,355.00	
Plugging drill holes, 64 holes @ $5.00 per hole	320.00	
Total cost, Area 1		$ 26,675.00

Area 2

Preliminary pattern drilling, 19 churn drill holes, 3,985 ft. @ $1.50 per foot	5,977.50	
Structure drilling - 38 churn drill holes, 7,970 ft. @ $1.50 per foot	11,955.00	
Drilling to delineate the ore bodies - 95 churn drill holes, 19,925 ft. @ $1.50 per foot	29,887.50	
Total cost for churn drilling, Area 2	47,820.00	
Plugging drill holes, 152 holes @ $5.00 per hole	760.00	
Total Cost, Area 2		$ 48,580.00

Area 3

Preliminary pattern drilling - 53 churn drill holes, 7,575 ft. @ $1.50 per foot	11,362.50	
Structure drilling - 106 churn drill holes, 15,150 ft. @ $1.50 per foot	22,725.00	

Drilling to delineate the ore bodies - 228 churn drill holes - 32,586 ft. @ $1.50 per foot	$48,879.00	
Total cost for churn drilling, Area 3	$82,966.50	
Plugging drill holes, 387 holes @ $5.00 per hole	1,935.00	
Total Cost Area 3		$ 84,901.50

Area 4

Preliminary pattern drilling - 7 churn drill holes, 860 ft. @ $1.50 per foot	1,290.00	
Structure drilling - 14 churn drill holes, 1,720 ft. @ $1.50 per foot	2,580.00	
Drilling to delineate the ore body - 27 churn drill holes, 3,317 ft. @ $1.50 per foot	4,975.50	
Total cost for churn drilling, Area 4	8,845.50	
Plugging drill holes, 48 holes @ $5.00 per hole	240.00	
Total Cost, Area 4		9,085.50
Chief field geologist at not to exceed $425.00 per month for a maximum of 18 months	7,650.00	
Field geologist at not to exceed $397.00 per month for a maximum of 18 months	7,146.00	
Total Cost, Geologists		14,796.00

NOTE: For the purposes of this contract, one month's services of a geologist represents a unit of work. The Government will contribute to these agreed, estimated costs, as they accrue, in lieu of actual costs.

Total cost of the project	$184,038.00
Government participation @ 50%	$ 92,019.00

G U A R A N T Y

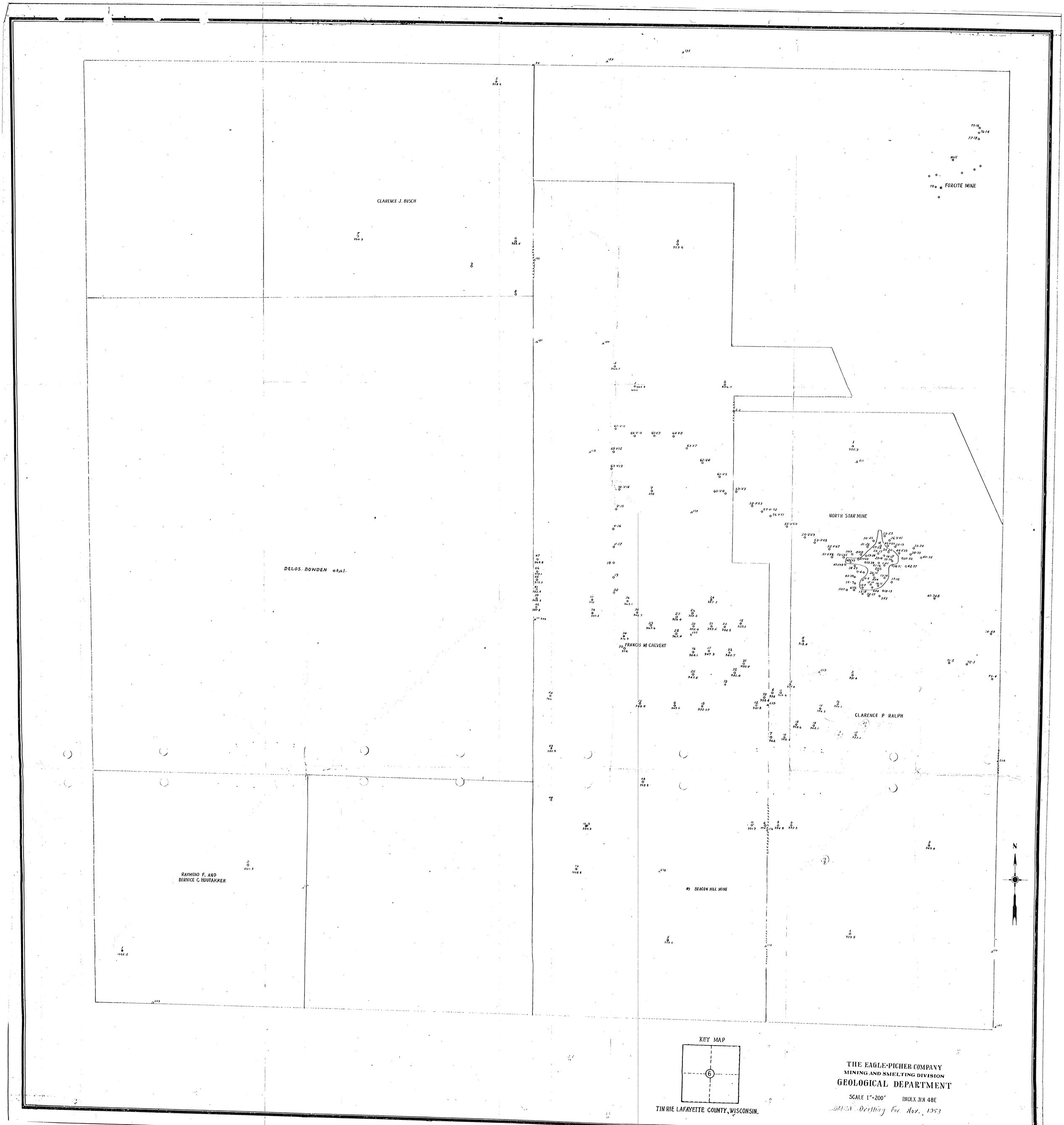
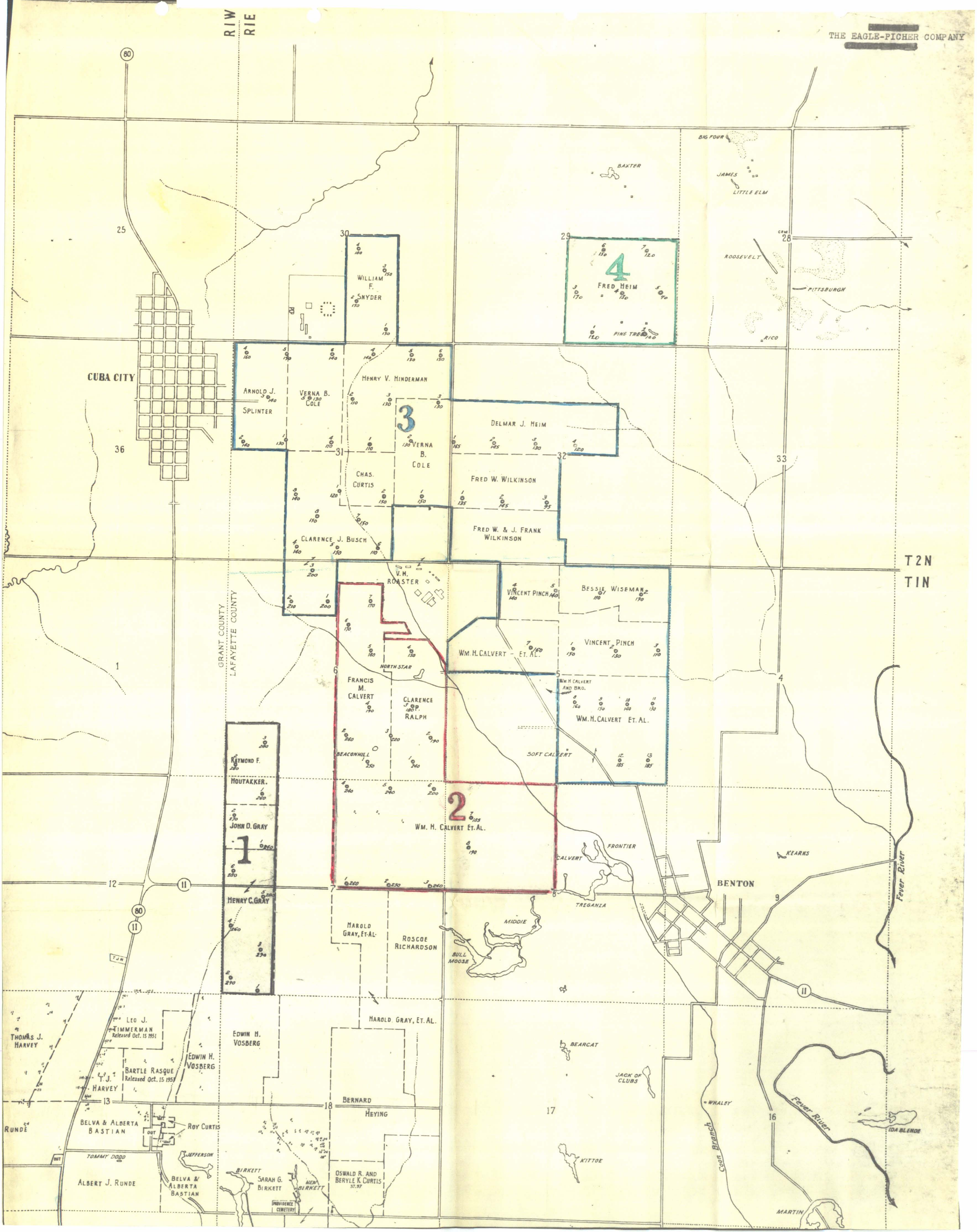
In consideration of the waiver by the United States of America of the requirement of an Owner's Consent to Lien agreement as set forth in Article 2(b) of the attached Exploration Project Contract between the Operator and the United States of America, the Operator hereby guarantees the payment to the United States of America of royalties, as specified in Article 6 of said Contract, upon any and all ore discovered or developed as a result of said Contract, which is mined within 10 years from the date of said Contract, by the Operator or its successor in interest; Provided, That in the event the Operator, without consideration, surrenders and terminates its leasehold interests in all of the tracts included in the description in Article 2 of the contract form, and terminates all of its mining operations in said property, then and in that event all liability of the Operator under this Contract shall cease. If for any reason the net smelter returns from operations that would be subject under said Contract to such payments to the United States of America are not available as a means of measuring the amount of such payment, then the Operator agrees and undertakes to make such payment according to the best estimates of the amount that can reasonably be made, and in the event of dispute as to such estimate, the Operator agrees that the determination thereof by either the Administrator of Defense Minerals Exploration Administration or by the Director of the United States Bureau of Mines shall be final and binding upon

the Operator; provided, however, that should the Operator, prior to accrual of any obligation to pay under this guaranty, furnish to the United States the Owner's Consent to Lien agreement required by Article 2(b) of said Contract this covenant shall thereupon become fully satisfied and of no further force or effect.

Dated: June 25, 1952.

EAGLE-PICHER COMPANY

By [signature]


CLARENCE J. BUSCH
DELOS BOWDEN et al.
RAYMOND F. AND
BERNICE C HOUTAKKER
FORCITE MINE
NORTH STAR MINE
FRANCIS M CALVERT
CLARENCE P RALPH
BEACON HILL MINE
N
KEY MAP
6
TIN RIE LAFAYETTE COUNTY, WISCONSIN.
THE EAGLE-PICHER COMPANY
MINING AND SMELTING DIVISION
GEOLOGICAL DEPARTMENT
SCALE 1"=200'
INDEX 3IN 48E
DMEA Drilling for Nov., 1953

THE EAGLE-PICHER COMPANY